# General Estimates System Coding Manual

1995

GES **GES** GES **GES** GES GES GES GES GES GES GES 



U.S. Department of Transportation

National Highway Traffic Safety

Administration





Note: The hand symbol seen throughout this manual and help system denotes information that is new to the 1995 GES Coding Manual.

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# **Accident Type**

### **Values**

To determine the accident type:

- Determine the category.
- Determine the configuration.
- Determine the specific accident type.

# Questions to ask before selecting a category

#### General

- Was a vehicle backing?
- How many in-transport vehicles were involved in the First Harmful Event (A06)?
- Were the in-transport vehicles on the same trafficway?
- In what direction were the vehicles headed, relative to each other?

#### Category I: Single Driver

- Did the vehicle leave the roadway, and on what side?
- Is there insufficient information to choose between configurations? (If so, use "99".)

#### Right & Left Roadside Departure

- Was there a control or traction loss?
- Was there a successful avoidance maneuver?

### Forward Impact

- What was the object that was struck?
- Did the vehicle depart off the end of the roadway?

#### Category II: Same Trafficway, Same Direction

- What was the plane of contact for each vehicle?
- Did a successful avoidance maneuver take place?
- Is there insufficient information to choose between configurations? (If so, use "99.")

#### Rear End

- What was the plane of contact for each vehicle?
- Was the struck vehicle stopped, going slower, slowing?
- Which vehicle was the striking vehicle?

#### Forward Impact

- What was the plane of contact for each vehicle?
- What was the object avoiding?
- Was there control or traction loss?
- Which vehicle was the striking vehicle?

#### Sideswipe/Angle

- Did either vehicle intentionally change lanes, if so which one(s)?
- What side was each vehicle on, relative to the other vehicle?

#### Category III: Same Trafficway, Opposite Direction

- What was the plane of contact for each vehicle?
- Did a successful avoidance maneuver take place?
- Is there insufficient information to choose between configurations? (If so, use "99.")

#### Head-On

• Which vehicle moved into the other vehicle's lane?

#### Forward Impact

- Was there control or traction loss?
- What was the object avoiding?
- Which vehicle made the avoidance maneuver?

#### Sideswipe/Angle

• Which vehicle moved into the other vehicle's lane?

#### Category IV: Changing Trafficway, Vehicle Turning

- Which way did the vehicle turn, relative to the other vehicle?
- Is there sufficient information to choose between configurations? (If so, use "99.")

#### Turn Across Path

- What was each vehicle's direction of travel, relative to the other vehicle?
- In what direction was the turning vehicle turning?
- Which vehicle was turning?

### **Category V: Intersecting Paths**

### Straight Paths

- What was the plane of contact for both vehicles?
- Which vehicle was the striking vehicle?

# **Category VI: Miscellaneous**

### Backing/Miscellaneous

• Which vehicle, if any, was backing?

# A01 Date

# **Element Values**

Format: MM/DD/95

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|---|---|---|---|----|----|---|-----|---|---|---|---|---|
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|   |   | v |   |    | 11 |   |     |   | в | • |   | н |

| <br> |          |    |           |
|------|----------|----|-----------|
| 01   | January  | 07 | July      |
| 02   | February | 08 | August    |
| 03   | March    | 09 | September |
| 04   | April    | 10 | October   |
| 05   | May      | 11 | November  |
| 06   | June     | 12 | December  |
|      |          |    |           |

### Day: DD

Range: 01 through 31, 99

01-31 Day

99 Unknown

# **Remarks**

If the PAR indicates (usually a hit-and-run) that the accident occurred between some PM and AM time (e.g., 8:00 PM and 6:00 AM) on either a preceding or following day, code the accident as occurring on the following day. If a range of days is indicated (e.g., between Sunday and Friday), code the last date of the range (e.g., Friday).

When the day is not available on the PAR use the day listed on the Stratification Record if it is available.

If the month cannot be determined from the PAR, enter the month of the Ending Contact Date from the Inventory Record.

|       |                         | A01  |
|-------|-------------------------|--|
|       | IF                      | THEN   |
| AAO34 | MONTH (A1) equals 05-09 | ATMOSPHERIC CONDITION (A20) should not equal 3 or 4.     |
| AA035 | MONTH (A1) equals 05-09 | ROADWAY SURFACE CONDITION (A15) should not equal 3 or 4. |

# A02 Time

# **Element Values**

Format: HHMM X

#### **Non-Military**

| HH = Hour  | MM = Minutes | X = Time Designator (A2A) |  |
|------------|--------------|---------------------------|--|
| 01-12      | 00-59        | A AM                      |  |
| 99 Unknown | 99 Unknown   | P PM                      |  |
|            |              | Blank Unknown             |  |
| Military   | ,            |                           |  |
| HH = Hour  | MM = Minutes | X = Time Designator (A2A) |  |
| 00-24      | 00-59        | M Military                |  |
| 99 Unknown | 99 Unknown   | Blank Unknown             |  |
|            | •            |                           |  |

### **Remarks**

Enter time as shown on the PAR. If the hour (HH) or the time designator (X) cannot be determined, then enter "9999" and leave the time designator "Blank".

If the PAR indicates the accident occurred during some time interval of greater than one hour (e.g., 8:00 PM to 6:00 AM, or 8:00 AM to 5:00 PM), enter "9999" (Unknown) and "Blank" respectively. However, if the interval was one hour or less, code the midpoint of the interval (e.g., 8:00 PM to 9:00 PM, enter "0830" and "P").

When the time is available but the time designator is blank on the PAR, base the time designator on light condition (e.g. time is 1000, light condition is daylight, code time designator A for a.m.)

- AM Starts at 12:00 Midnight
- PM Starts at 12:00 Noon
- 12 AM (or 12:00 midnight) is the equivalent of 2400 in military time
- 12:01 AM is the equivalent of 0001 in military time

| Δ | N | 2 |
|---|---|---|
|   |   |   |

|       | IF   | THEN  |
|-------|--|---|
| AA001 | LIGHT CONDITION (A19) equals<br>4 and TIME DESIGNATOR (A2A)<br>equals A              | TIME (A2) must not equal 1000-<br>1159, or 1199.        |
| AA002 | LIGHT CONDITION (A19) equals 5 and TIME DESIGNATOR (A2A) equals P                    | TIME (A2) must not equal 1200 0200, 0299, or 1000-1200. |
| AA003 | LIGHT CONDITION (A19) equals 5 and TIME DESIGNATOR (A2A) equals M                    | TIME (A2) must not equal 2200 2400, 0001-1400, or 1499. |
| AA006 | TIME (A2) equals 1000-1500 and<br>TIME DESIGNATOR (A2A) equals<br>M                  | LIGHT CONDITION (A19) should equal 1 or 9.              |
| AA052 | TIME(A2) equals 1000-1159, 1199<br>and TIME DESIGNATOR (A2A)<br>equals A             | LIGHT CONDITION (A19) should equal 1 or 9.              |
| AA053 | TIME (A2) equals 1200-0300 and TIME DESIGNATOR (A2A) equals P                        | LIGHT CONDITION (A19) should equal 1 or 9.              |
| AA054 | TIME (A2) equals 1000-1159, 1199<br>and TIME DESIGNATOR (A2A)<br>equals P            | LIGHT CONDITION (A19) should equal 2, 3 or 9.           |
| AA055 | TIME (A2) equals 1200-0300 and TIME DESIGNATOR (A2A) equals A                        | LIGHT CONDITION (A19) should equal 2, 3 or 9.           |
| AA057 | TIME (A2) equals 2200-2400,<br>0001-0300, 0399 and TIME<br>DESIGNATOR (A2A) equals M | LIGHT CONDITION (A19) should equal 2, 3 or 9.           |
| AA060 | LIGHT CONDITION (A19) equals 2 and TIME DESIGNATOR (A2A) equals A                    | TIME (A2) must not equal 1000-<br>1159, or 1199.        |
| AA061 | LIGHT CONDITION (A19) equals 2 and TIME DESIGNATOR (A2A) equals P                    | TIME (A2) must not equal 1200-0300, or 0399.            |

|       | iF  | THEN   |
|-------|---|--|
| AA062 | LIGHT CONDITION (A19) equals 2 and TIME DESIGNATOR (A2A) equals M       | TIME (A2) must not equal 1000-<br>1500, or 1599.     |
| AA065 | LIGHT CONDITION (A19) equals 1 and TIME DESIGNATOR (A2A) equals A       | TIME (A2) must not equal 1201 0300, 0399.            |
| AA066 | LIGHT CONDITION (A19) equals 1 and TIME DESIGNATOR (A2A) equals M       | TIME (A2) must not equal 2200-2400, 0001 0300, 0399. |
| AA067 | LIGHT CONDITION (A19) equals 3 and TIME DESIGNATOR (A2A) equals A       | TIME (A2) should not equal 1000-<br>1159, 1199.      |
| AA068 | LIGHT CONDITION (A19) equals<br>3 and TIME DESIGNATOR (A2A)<br>equals M | TIME (A2) should not equal 1000-<br>1500, 1599.      |
| AA069 | LIGHT CONDITION (A19) equals 3 and TIME DESIGNATOR (A2A) equals P       | TIME (A2) should not equal 1200-0300, 0399.          |
| AA072 | LIGHT CONDITION (A19) equals 1 and TIME DESIGNATOR (A2A) equals P       | TIME(A2) must not equal 1000-<br>1159, 1199.         |
| AA073 | LIGHT CONDITION (A19) equals 1 and TIME DESIGNATOR (A2A) equals A       | TIME (A2) should equal 0500-1159, 1199, 9999.        |
| AA074 | LIGHT CONDITION (A19) equals<br>1 and TIME DESIGNATOR (A2A)<br>equals M | TIME (A2) should equal 0500-2100, 2199, 9999.        |
| AA075 | LIGHT CONDITION (A19) equals 1 and TIME DESIGNATOR (A2A) equals P       | TIME (A2) should equal 1200-0900, 0999, 9999.        |
| AA076 | LIGHT CONDITION (A19) equals 2 and TIME DESIGNATOR (A2A) equals A       | TIME (A2) should equal 1200-0900, 0999, 9999.        |
| AA077 | LIGHT CONDITION (A19) equals 2 and TIME DESIGNATOR (A2A) equals P       | TIME (A2) should equal 0400-1159, 1199, 9999.        |

|       | IF   | THEN   |
|-------|--|--|
| AA078 | LIGHT CONDITION (A19) equals 2 and TIME DESIGNATOR (A2A) equals M      | TIME (A2) should equal 1600-2400, 0001-0900, 0999, 9999. |
| AA079 | LIGHT CONDITION (A19) equals 4 and TIME DESIGNATOR (A2A) equals M      | TIME (A2) must not equal 1000-2400, 0001-0300, 0399.     |
| AA080 | LIGHT CONDITION (A19) equals 4 and TIME DESIGNATOR (A2A) equals A or M | TIME (A2) should equal 0400-0900, 0999, 9999.            |
| AA081 | LIGHT CONDITION (A19) equals 5 and TIME DESIGNATOR (A2A) equals P      | TIME (A2) should equal 0400-0900, 0999, 9999.            |
| AA082 | LIGHT CONDITION (A19) equals 5 and TIME DESIGNATOR (A2A) equals M      | TIME (A2) should equal 1600-2100, 2199, 9999.            |
| AA083 | TIME (A2) equals 9999  | TIME DESIGNATOR (A2A) must be blank.                     |
| AA089 | LIGHT CONDITION (A19) equals 6   | TIME (A2) should equal 9999.                             |
| AA093 | Reminder: Use Time (A2/A2A) to choose between Dawn (4) and Dusk (5).   |  |
|       |  | A2A  |
|       | IF   | THEN   |
| AA001 | LIGHT CONDITION (A19) equals 4 and TIME DESIGNATOR (A2A) equals A      | TIME (A2) must not equal 1000-<br>1159, 1199.            |
| AA002 | LIGHT CONDITION (A19) equals 5 and TIME DESIGNATOR (A2A) equals P      | TIME (A2) must not equal 1200-0200, 0299, 1000-1200.     |
| AA003 | LIGHT CONDITION (A19) equals 5 and TIME DESIGNATOR (A2A) equals M      | TIME (A2) must not equal 2200 2400, 0001 1400, 1499.     |

|       | IF   | THEN  |
|-------|--|---|
| AA006 | TIME (A2) equals 1000 1500 and<br>TIME DESIGNATOR (A2A) equals<br>M                  | LIGHT CONDITION (A19) should equal 1, 9.      |
| AA052 | TIME(A2) equals 1000-1159, 1199<br>and TIME DESIGNATOR (A2A)<br>equals A             | LIGHT CONDITION (A19) should equal 1, 9.      |
| AA053 | TIME (A2) equals 1200-0300 and TIME DESIGNATOR (A2A) equals P                        | LIGHT CONDITION (A19) should equal 1, 9.      |
| AA054 | TIME (A2) equals 1000-1159, 1199 and TIME DESIGNATOR (A2A) equals P                  | LIGHT CONDITION (A19) should equal 2, 3, 9.   |
| AA055 | TIME (A2) equals 1200-0300 and<br>TIME DESIGNATOR (A2A) equals<br>A                  | LIGHT CONDITION (A19) should equal 2, 3, 9.   |
| AA057 | TIME (A2) equals 2200-2400, 0001<br>0300, 0399 and TIME<br>DESIGNATOR (A2A) equals M | LIGHT CONDITION (A19) should equal 2, 3, 9.   |
| AA060 | LIGHT CONDITION (A19) equals 2 and TIME DESIGNATOR (A2A) equals A                    | TIME (A2) must not equal 1000-<br>1159, 1199. |
| AA061 | LIGHT CONDITION (A19) equals 2 and TIME DESIGNATOR (A2A) equals P                    | TIME (A2) must not equal 1200-0300, 0399.     |
| AA062 | LIGHT CONDITION (A19) equals 2 and TIME DESIGNATOR (A2A) equals M                    | TIME (A2) must not equal 1000-<br>1500, 1599. |
| AA063 | LIGHT CONDITION (A19) equals 4   | TIME DESIGNATOR (A2A) must not equal P.       |
| AA064 | LIGHT CONDITION (A19) equals 5   | TIME DESIGNATOR (A2A) must not equal A.       |
| AA065 | LIGHT CONDITION (A19) equals 1 and TIME DESIGNATOR (A2A) equals A                    | TIME (A2) must not equal 1201-0300, 0399.     |

|         | IF  | THEN   |
|---------|---|--|
| AA066   | LIGHT CONDITION (A19) equals<br>1 and TIME DESIGNATOR (A2A)<br>equals M | TIME (A2) must not equal 2200-<br>2400, 0001-0300, 0399. |
| AA067   | LIGHT CONDITION (A19) equals 3 and TIME DESIGNATOR (A2A) equals A       | TIME (A2) should not equal 1000-<br>1159, 1199.          |
| AA068   | LIGHT CONDITION (A19) equals 3 and TIME DESIGNATOR (A2A) equals M       | TIME (A2) should not equal 1000-<br>1500, 1599.          |
| AA069   | LIGHT CONDITION (A19) equals 3 and TIME DESIGNATOR (A2A) equals P       | TIME (A2) should not equal 1200-0300, 0399.              |
| AA072   | LIGHT CONDITION (A19) equals 1 and TIME DESIGNATOR (A2A) equals P       | TIME(A2) must not equal 1000-<br>1159, 1199.             |
| AA073   | LIGHT CONDITION (A19) equals 1 and TIME DESIGNATOR (A2A) equals A       | TIME (A2) should equal 0500-1159, 1199, 9999.            |
| AA074   | LIGHT CONDITION (A19) equals 1 and TIME DESIGNATOR (A2A) equals M       | TIME (A2) should equal 0500-2100, 2199, 9999.            |
| AA075   | LIGHT CONDITION (A19) equals<br>1 and TIME DESIGNATOR (A2A)<br>equals P | TIME (A2) should equal 1200-0900, 0999, 9999.            |
| AA076 . | LIGHT CONDITION (A19) equals 2 and TIME DESIGNATOR (A2A) equals A       | TIME (A2) should equal 1200-0900, 0999, 9999.            |
| AA077   | LIGHT CONDITION (A19) equals 2 and TIME DESIGNATOR (A2A) equals P       | TIME (A2) should equal 0400-1159, 1199, 9999.            |
| AA078   | LIGHT CONDITION (A19) equals 2 and TIME DESIGNATOR (A2A) equals M       | TIME (A2) should equal 1600-2400, 0001-0900, 0999, 9999. |
| AA079   | LIGHT CONDITION (A19) equals 4 and TIME DESIGNATOR (A2A) equals M       | TIME (A2) must not equal 1000-2400, 0001-0300, 0399.     |

|       | IF   | THEN  |
|-------|--|---|
| AA080 | LIGHT CONDITION (A19) equals<br>4 and TIME DESIGNATOR (A2A)<br>equals A or M | TIME (A2) should equal 0400-0900, 0999, 9999. |
| AA081 | LIGHT CONDITION (A19) equals 5 and TIME DESIGNATOR (A2A) equals P            | TIME (A2) should equal 0400-0900, 0999, 9999. |
| AA082 | LIGHT CONDITION (A19) equals<br>5 and TIME DESIGNATOR (A2A)<br>equals M      | TIME (A2) should equal 1600-2100, 2199, 9999. |
| AA083 | TIME (A2) equals 9999  | TIME DESIGNATOR (A2A) must be blank.          |
| AA089 | If LIGHT CONDITION (A19) equals 6  | TIME (A02) should equal 9999                  |
| AA093 | REMINDER: Use Time (A2/A2A) to choose between DAWN (4) and DUSK (5).         |   |

# A03 Number of Motor Vehicles

### **Element Values**

Range: 01 through 30

#### Remarks

Each accident must have at least one in-transport motor vehicle involved. The value entered must equal the total number of in-transport motor vehicles involved in the accident. Vehicles not in-transport are not included in this variables count.

In order for a vehicle to be considered in-transport, the motor vehicle must be either (1) on the roadway or (2) in motion on the trafficway. This includes driverless vehicles.

When one motor vehicle is towing another, the number of motor vehicles entered depends on the type of linkage between the vehicles. A fixed linkage is defined as one which has the property of keeping the towed unit separated from the power unit by a distance which is essentially constant. Included within this definition are cradle linkages where the towed unit has two or more wheels off the ground. A nonfixed linkage (such as a rope or a chain) requires the towed unit to be manually controlled.

If the PAR indicates (probably in the narrative section) the linkage between the units is fixed, consider the towed unit as cargo throughout the entire accident sequence, regardless of subsequent events/impacts sustained by the towed unit. In other words, a vehicle towed by a fixed linkage: (1) is never considered as an in-transport vehicle, and (2) will be considered as cargo associated with the power unit.

If the linkage between the units is nonfixed, each vehicle is considered to be in-transport, and only the vehicle(s) involved in the accident sequence can be counted. If no information is available regarding type of linkage, assume fixed linkage.

Hit-and-run accidents may cause some confusion on this variable. The count is increased for each in-transport motor vehicle involved in the accident independent of the amount of information collected on the vehicles by the police. Parked vehicles may or may not be counted depending on whether or not they were in-transport.

The maximum number of vehicles that can be coded is 30. If more than 30 vehicles are involved, code only the first 30.

|       |   | A03   |
|-------|---|---|
|       | IF  | THEN  |
| AA014 | FIRST HARMFUL EVENT (A6) equals 25  | NUMBER OF MOTOR VEHICLES (A3) must be greater than 01.  |
| AA086 | MANNER OF COLLISION (A7) does not equal 0 or 8  | NUMBER OF MOTOR VEHICLES (A3) must be greater than 01.  |
| AP015 | NUMBER OF MOTOR VEHICLES (A3) is greater than 00  | at least one PERSON TYPE (P3) should equal 1, 2 or 9.   |
| AV019 | NUMBER OF MOTOR VEHICLES (A3) is greater than 01  | there should be at least one vehicle with TRAVEL SPEED (V11) of 01 97, 99, or blank.                  |
| AV020 | code(s) used for the VEHICLE(S) IN  | PE codes is incompatible, compare the VOLVED in the FHE with the All Vehicles not involved in the FHE |
| AV097 | RELATION TO ROADWAY (A10) equals 4 and NUMBER OF MOTOR VEHICLES (A3) equals 01  | ACCIDENT TYPE (V23) should equal 06-10, 98, 99.   |
| AV184 | NUMBER OF MOTOR VEHICLES (A3) equals 01 and RELATION TO ROADWAY (A10) equals 2 or 3 and CORRECTIVE ACTION ATTEMPTED (V27) equals 00 | CRITICAL EVENT (V26) should equal 010-060, 099, 100, 101, 102, 199 or 994.                            |
| AV197 | NUMBER OF MOTOR VEHICLES (A3) equals 02 and one vehicle's VEHICLE ROLE (V22) equals 2   | the other vehicle's VEHICLE ROLE (V22) must not equal 2.  |
| AV213 | If NUMBER OF MOTOR VEHICLES (A3) equals 02 and MANNER OF COLLISION (A7) equals 2 and TRAVEL SPEED (V11) is greater than 00          | VEHICLE ROLE (V22) must equal 1 or 3.   |
| AV221 | NUMBER OF MOTOR VEHICLES (A3) is greater than 02  | CRITICAL EVENT (V26) must equal 994.  |

|          |       | IF  | THEN  |
|----------|-------|---|---|
|          | AV239 | NUMBER OF MOTOR VEHICLES (A3) equals 01 or 02                                 | CRITICAL EVENT (V26) must not equal 994.                        |
|          | PA200 | NON MOTORIST STRIKING VEHIC of the NUMBER OF MOTOR VEHIC to 99.               |   |
|          | PA201 | PERSON TYPE (P3) equals 3 8 and<br>NUMBER OF MOTOR VEHICLES<br>(A3) equals 01 | NON MOTORIST STRIKING<br>VEHICLE NUMBER (P22) must<br>equal 01. |
|          | VA001 | MOST HARMFUL EVENT (V20) equals 25  | NUMBER OF MOTOR VEHICLES (A3) must be greater than 01.          |
|          | VA014 | ACCIDENT TYPE (V23) equals 01   | NUMBER OF MOTOR VEHICLES (A3) should equal 01.                  |
|          | VA015 | ACCIDENT TYPE (V23) equals 20 91  | NUMBER OF MOTOR VEHICLES (A3) must be greater than 01.          |
|          | VA093 | VEHICLE ROLE (V22) equals 2<br>and NUMBER OF MOTOR<br>VEHICLES (A3) equals 01 | FIRST HARMFUL EVENT (A6) must not equal 31-50, 58, or 59.       |
| <b>K</b> | VA096 | NUMBER OF MOTOR VEHICLES<br>(A3) equals 01 and VEHICLE ROLE<br>(V22) equals 0 | FIRST HARMFUL EVENT (A6) must equal 01-10.                      |
|          | VA120 | Only ACCIDENT TYPE CODES 01-1 accident involves a single vehicle.             | 6, 92, 97, 98, 99, 00 can be used when                          |
|          | VA240 | CRITICAL EVENT (V26) equals 994   | NUMBER OF MOTOR VEHICLES (A3) must be greater than 02.          |
|          | VA241 | CRITICAL EVENT (V26) is not equal to 994                                      | NUMBER OF MOTOR VEHICLES (A3) must equal 01 or 02.              |

# A04 Number of Non-Motorists

### **Element Values**

Range: 00 through 25

### Remarks

The value entered must equal the number of nonmotorists involved in the accident. Non-Motorists are usually listed in the section used for the second or last vehicle.

Non-Motorists include: occupants of a vehicle not in-transport, pedestrians, bicyclists, other cyclists, and other nonmotorists.

"Occupant of vehicle not in-transport" represents those persons in or on a motor vehicle which is not in-transport when struck.

A "nonmotorist conveyance" is defined as any human-powered device by which a nonmotorist may move, or by which a pedestrian or nonmotorist may move another nonmotorist, other than by pedaling. A nonmotorist conveyance includes the following: baby carriage, coaster wagon, ice skates, roller skates, push cart, scooter, skate board, skis, sled, wheel chair, rickshaw, etc. This includes those persons in a nonmotorist conveyance who hold onto a motor vehicle in motion. Excluded are pedalcyclists.

A "pedestrian" is defined as any person who is on a trafficway or on a sidewalk or path contiguous with a trafficway, and who is not in or on a nonmotorist conveyance. This includes persons who are in contact with the ground, roadway, etc., but who are holding onto a vehicle.

A "bicyclist" refers to only those pedalcyclists who were either a driver or passenger on a bicycle. This includes those bicyclists who hold onto a motor vehicle in motion.

"Other cyclist" refers to all other pedalcyclists such as persons on tricycles or unicycles. This includes those pedalcyclists who hold onto a motor vehicle in motion.

"Other nonmotorist" includes any other person not included under the above definitions of a pedestrian, bicyclist, other cyclist, or occupant of a motor vehicle not in-transport. Persons riding on an animal or in an animal powered conveyance are one example. Any person outside a trafficway or outside a sidewalk or path contiguous with a trafficway is another.

The maximum number of nonmotorists that can be coded is 25. If more than 25 nonmotorists are involved code only the first 25.

| -     |   | A04   |
|-------|---|---|
|       | IF  | THEN  |
| AA033 | FIRST HARMFUL EVENT (A6) equals 21, 22, or 27   | NUMBER OF NON MOTORISTS (A4) must not equal 00.                                   |
| AA070 | NUMBER OF NON MOTORISTS (A4) equals 00  | PEDESTRIAN/BIKE ACCIDENT TYPE (A24) must equal 0000.                              |
| AP135 | RELATION TO JUNCTION (A9) equals 03 or 13 and NUMBER OF NON MOTORISTS (A4) is greater than 00                                     | NON MOTORIST LOCATION (P13) should not equal 01, 02, 08 or 09.                    |
| AV022 | FIRST HARMFUL EVENT (A6) equals 21 and NUMBER OF NON MOTORISTS (A4) equals 01 and PEDESTRIAN/BIKE ACCIDENT TYPE (A24) equals 0220 | at least one MOVEMENT PRIOR TO CRITICAL EVENT (V21) must equal 07, 08, 13, or 98. |
| VA218 | MOVEMENT PRIOR TO CRITICAL<br>EVENT (V21) equals 00 and<br>NUMBER OF NON MOTORISTS<br>(A4) is greater than 00                     | PEDESTRIAN/BIKE ACCIDENT<br>TYPE (A24) must equal 0210 or<br>9999.                |

# A05 Land Use

### **Element Values**

- 1 Within area of population 25,000 50,000
- 2 Within area of population 50,000 100,000
- Within area of population 100,000+
- 8 Other area
- 9 Unknown

### Remarks

If the PAR indicates that the location of the accident is within a city or town, then the automated data entry system will cue you as to the correct value to enter.

Enter "8" (Other area) if the accident's location is known to be within a city or town not matched with codes "1" through "3".

Enter "9" (Unknown) if the accident's location is unclear or no information is available.

# **Consistency Checks**

A05

IF THEN

AA094 For this PSU, LAND USE (A5) must equal 3.

AA095 For this PSU, LAND USE (A5) should equal 3.

# **A06 First Harmful Event**

| Element V      | alues  |
|----------------|--|
| Non-Collision  |  |
| 01             | Rollover/Overturn  |
| 02             | Fire/Explosion   |
| 03             | Immersion  |
| 05             | Jackknife  |
| 06             | Non-Collision Injury   |
|                | (Injured In or Fell From Vehicle)                              |
| 08             | Other Non-Collision  |
| 09             | Non-Collision - No Details                                     |
| 10             | Thrown Or Falling Object                                       |
| Collision with | Object Not Fixed   |
| 21             | Pedestrian   |
| 22             | Cycle Or Cyclist (Pedalcycle/Pedalcyclist)                     |
| 23             | Railway train  |
| 24             | Animal   |
| 25             | Motor Vehicle In Transport                                     |
| 26             | Parked Motor Vehicle (Or Other Motor Vehicle Not In Transport) |
| 27             | Other Type Non-Motorist  |
| 28             | Other Object Not Fixed   |
| 29             | Object Not Fixed - No Details                                  |
| Collision with | Fixed Object   |
| 31             | Ground   |
| 32             | Building   |
| 33             | Impact Attenuator/Crash Cushion                                |
| 34             | Animal   |
| 35             | Guardrail  |
| 36             | Concrete Traffic Barrier Or Other Longitudinal Barrier Type    |
| 37             | Sign Post, Utility Pole, Or Other Support                      |

- 38 Culvert Or Ditch
- 39 Curb
- 40 Embankment
- 41 Fence
- 42 Wall
- 43 Fire Hydrant
- 44 Shrubbery Or Bush
- 45 Tree
- 46 Boulder
- Pavement Surface Irregularity (ruts, potholes, grates, plates, etc.)
- 58 Other Fixed Object
- 59 Fixed Object No Details
- 99 Unknown

#### Remarks

Every motor vehicle traffic accident consists of a series of events. In classification by type, one of the events must be selected before further classification can be made. For uniformity in classification, the "First Harmful Event" is the "first" property damage or injury-producing event that can be determined to have happened in the accident.

Enter "01" (Rollover/Overturn) when a motor vehicle rotates (rollover), at least, one quarter turn in any nonhorizontal direction. Vehicles which first impact pedestrians, non-motorists, vehicles, animals, trains, or other objects, receive codes "21" through "59". Use this code also, when an uncontrolled motorcycle first contacts the ground or pavement surface. All motor vehicles may rollover/overturn, with the exception of motorcycles, which can overturn but not rollover.

Enter "05" (Jackknife) whenever there is sufficient rotation (articulation) between a tractor/trailer combination such that they contact each other. Jackknife is restricted to truck-tractor combinations.

Enter "06" [Non-Collision Injury (Injured In or Fell From vehicle)] when a person falls from or is injured inside the vehicle. This includes persons jumping or stepping from moving vehicles, persons falling from pickup beds, and persons colliding with the interior of a vehicle during a sudden stop.

Enter "08" (Other Non-Collision) when a vehicle sets an object in motion that strikes or is struck by a vehicle before the object stabilizes. Examples include dislodged cargo, spewed gravel, etc. It may be used in other situations as well.

Enter "10" (Thrown Or Falling Object) when any object (1) is thrown (intentionally or unintentionally) and impacts an in-transport vehicle, or (2) falls onto, into, or in the path of an in-transport motor vehicle. However, objects set in motion by an in-transport vehicle are to be coded under code "08" (Other Non-Collision). If a tree limb falls from a tree and is contacted by a car, enter this code. If a tree limb falls from a tree trimming truck and is struck, enter code "08". If a child maliciously throws a tree limb off an overpass into traffic below, enter this code.

Enter "21" (Pedestrian) when any person who was involved in the first harmful event is on a trafficway or on a sidewalk or path contiguous with a trafficway, and who is not in or on a nonmotorist conveyance. A nonmotorist conveyance is defined as any human-powered device by which a nonmotorist may move, or by which a pedestrian or nonmotorist may move another nonmotorist, other than by pedaling. A nonmotorist conveyance includes the following: baby carriage, coaster wagon, ice skates, roller skates, push cart, scooter, skate board, skis, sled, wheel chair, rickshaw, etc. Excluded are pedalcyclists.

Enter "22" [Cycle or Cyclist (Pedalcycle/Pedalcyclist)] when any occupant of a pedalcycle was involved in the first harmful event.

Enter "25" (Motor Vehicle In Transport) when the initial impact occurred between two motor vehicles in-transport. A vehicle parked in a mid-block bus stop, fire hydrant, etc., should be considered as in-transport if the vehicle should not be parked in the location (i.e., parked buses, fire trucks, etc., are considered not in-transport while a passenger car, motorcycle, etc., are considered in-transport).

Enter "26" [Parked Motor Vehicle (Or Other Motor Vehicle Not In Transport)] when the initial impact occurred between a motor vehicle in-transport and a motor vehicle neither on a roadway nor in motion.

Enter "27" (Other Type Non-Motorist) when the person impacted is not a pedestrian or a pedalcyclist. [NOTE: If the first harmful event occurs with a motor vehicle not in-transport which contains a nonmotorist (e.g., Occupant of vehicle not in-transport), enter "26" (Parked Motor Vehicle) above.]

Enter "28" (Other Object Not Fixed) when the initial impact is between a motor vehicle in-transport and any other object that is moving or not anchored prior to the accident. Included in this category is an initial collision between a motor vehicle in-transport, which leaves its roadway, and a motor vehicle in motion off any trafficway. For example, a vehicle loses control and contacts a snowmobile in motion off the trafficway.

Enter "31" (Ground) when the initial impact is with pavement. This value is not to be entered when the first harmful event is a "Rollover/Overturn" ("01").

Enter "33" (Impact Attenuator/Crash Cushion) when the first harmful event is with any device described on the PAR as an impact attenuator or crash cushion.

**Enter "34" (Bridge Structure)** when the initial contact was with any part of a bridge structure. This includes:

- support structure
- overpass structure (not "front face")
- bridge rail
- bridge-pier abutment
- parapet end

For contact to the "front face" of an overpass structure (e.g., the top of the cargo area of a truck strikes the front of a bridge with a low clearance) enter "58" (Other Fixed Object). Included within the meaning of bridge structure are supports for railway underpasses, including those for mass transit type trains.

If the initial impact was with an impact attenuator protecting a bridge support, then enter "33" (Impact Attenuator/Crash Cushion). Contact with the underside of the bridge deck is coded "58" (Other Fixed Object).

Values "35" and "36" are chosen based upon design and composition. Location is not considered when choosing a value.

Enter "35" (Guardrail) whenever the initial impact occurs with any longitudinal barrier described on the PAR as a guardrail, regardless of its location.

Enter "36" (Concrete Traffic Barrier Or Other Longitudinal Barrier Type) whenever the initial impact described on the PAR occurs with a concrete barrier (commonly referred to as a GM or New Jersey barrier), regardless of its location. Enter this value for temporary (e.g., construction sites) and permanent installations. Concrete traffic barriers located on a bridge with a closed median are not considered bridge rails (element "34"). Concrete traffic barriers located on the outer road edges of a bridge are considered bridge rails (element "34").

Enter "37" (Sign Post, Utility Pole, or Other Support) when the impact occurs to: (1) a support for a highway or traffic sign, (2) anything that supports a sign under which vehicles travel, (3) a street light, (4) a support for utility lines, (5) a traffic signal pole, (6) any non-highway or non-traffic sign (e.g., a private sign), (7) a mail box post, (8) a delineator post, or (9) any other type post, pole, or support. This value should **not** be used when the initial impact was with any supporting structure of a bridge (see element "34" above).

Enter "38" (Culvert or Ditch) when the initial impact occurs with a culvert or ditch. A culvert is a man-made structure that allows passage over a drainage area and is that part of the structure which is intended to channel flow through the structure and maintain the stability/integrity of the road bed. If the structure has a portion above the road surface which is of sufficient height to engage above the wheels of an errant passenger vehicle and redirect it, that part of the structure is considered a bridge rail (element "34"). A ditch is a man made structure for drainage purposes. A ditch ends where a culvert begins and resumes on the opposite side of the culvert.

Enter "45" (Tree) when the initial impact is with a tree. This includes impacts with overhanging branches. Do not use this code if the tree is not standing. Trees which have fallen and are struck should be coded using "28" (Other Object Not Fixed) for small trees or "58" (Other Fixed Object) for large trees.

**Enter "46" (Boulder)** when an in-transport motor vehicle contacts any large (not defined but at least larger than gravel) stationary rock.

Enter "58" (Other Fixed Object) when the PAR describes the initial impact to any fixed object which is anchored and not moving and not specifically mentioned above. Collisions which may be classified using this code include (but are not limited to): (1) vehicles which sustain undercarriage damage by straddling the pavement and shoulder and impacting a prominent pavement lip, or (2) free falls or vaults from the road surface to the ground or pavement without being listed on the PAR as rolling over or overturning.

If the PAR indicates the initial impact was in a median, determine if the initial impact was with a longitudinal barrier (guardrail, concrete, or other). If a barrier was initially contacted, enter "35" (Guardrail) or "36" (Concrete Traffic Barrier or Other Longitudinal Barrier Type) based on the PAR description. If no longitudinal barrier was initially contacted but contact occurred to a nonraised paved surface, gravel, or grass, then enter "31" (Ground). If the PAR indicates that the initial harmful event is with a raised, paved area (concrete or asphalt), then enter "39" (Curb). This is true even if a barrier is anchored in the raised, paved area. If the median is depressed, select the element which best fits the PAR's impact description and enter "31" (Ground), "40" (Embankment), "44" (Shrubbery Or Bush), "45" (Tree), "46" (Boulder), "58" (Other Fixed Object), etc. whichever is most appropriate.

**Tunnels** are handled according to the following rules. If the PAR describes the impact as external (i.e., the impact is to the hill or mountainside), enter "40" (Embankment). If the impact is

to the tunnel entrance (i.e., not protected by guardrails or bridge rails that lead into a tunnel or impact attenuators), then enter "58" (Other Fixed Object). Enter "42" (Wall) if the plane of the tunnel is broad or wide enough that the tunnel entrance functions as a wall and contact is made with this wall. External impacts to impact attenuators are entered "33" (Impact Attenuator/Crash Cushion).

Internal or external impacts to: [a] median barriers should be entered "35" (Guardrail) or "36" (Concrete Traffic Barrier Or Other Longitudinal Barrier Type); [b] curbs (raised, paved medians) or walks should be entered "39" (Curb); or [c] the tunnel wall should be entered "42" (Wall). If contact is made with a bridge that leads into a tunnel, then enter "34" [Bridge Structure].

Enter "99" (Unknown) when there is not enough information to code any one particular event as the first property damage or injury producing event in the accident sequence.

|       |   | A06  |
|-------|---|--|
|       | IF  | THEN   |
| AA009 | FIRST HARMFUL EVENT (A6) equals 01-24, 26 46, 50, 58, or 59 | MANNER OF COLLISION (A7) must not equal 1 6.             |
| AA010 | FIRST HARMFUL EVENT (A6) equals 25                          | MANNER OF COLLISION (A7) must not equal 0.               |
| AA011 | FIRST HARMFUL EVENT (A6) equals 23                          | TRAFFIC CONTROL DEVICE (A16) must not equal 01-51, 98.   |
| AA012 | FIRST HARMFUL EVENT (A6) equals 26                          | RELATION TO ROADWAY (A10) must not equal 1.              |
| AA014 | FIRST HARMFUL EVENT (A6) equals 25                          | NUMBER OF MOTOR VEHICLES (A3) must be greater than 01.   |
| AA023 | FIRST HARMFUL EVENT (A6) equals 99                          | MANNER OF COLLISION (A7) should not equal 0-6.           |
| AA024 | FIRST HARMFUL EVENT (A6) equals 31-46, 58 or 59             | RELATION TO ROADWAY (A10) should not equal 1.            |
| AA025 | FIRST HARMFUL EVENT (A6) equals 23                          | RELATION TO JUNCTION (A9) should equal 05.               |
| AA030 | UNLIKELY: FIRST HARMFUL EVI                                 | ENT (A6) is equal to 02, 06, 33 or 50.                   |
| AA033 | FIRST HARMFUL EVENT (A6) equals 21, 22, or 27               | NUMBER OF NON MOTORISTS (A4) must not equal 00.          |
| AA037 | FIRST HARMFUL EVENT (A6) equals 21, or 22                   | PEDESTRIAN/BIKE ACCIDENT TYPE (A24) must not equal 0000. |

|       |  | 1116614  |
|-------|--|--|
| AA039 | PEDESTRIAN/BIKE ACCIDENT<br>TYPE (A24) equals 0410, 0420, or<br>0430, and FIRST HARMFUL<br>EVENT (A6) equals 21, 22, or 27 | RELATION TO ROADWAY (A10) must equal 1.  |
| AA042 | FIRST HARMFUL EVENT (A6) equals 22   | PEDESTRIAN/BIKE ACCIDENT TYPE (A24) must equal 0001 - 0099.                                |
| AA051 | PEDESTRIAN/BIKE ACCIDENT<br>TYPE (A24) equals 0610 or 0620<br>and FIRST HARMFUL EVENT<br>(A6) equals 21                    | RELATION TO ROADWAY (A10) must not equal 1.  |
| AA088 | FIRST HARMFUL EVENT (A6) equals 50   | RELATION TO ROADWAY (A10) must equal 1.  |
| AP001 | FIRST HARMFUL EVENT (A6) equals 21, 22, or 27, and RELATION TO ROADWAY (A10) equals 1                                      | there must be at least one NON MOTORIST LOCATION (P13) equal to 01-09, 11, 12, 19, 20, 99. |
| AP002 | FIRST HARMFUL EVENT (A6) equals 21, 22, or 27, and RELATION TO ROADWAY (A10) equals 2                                      | there must be at least one NON MOTORIST LOCATION (P13) equal to 08, 18, 98, or 99.         |
| AP003 | FIRST HARMFUL EVENT (A6)<br>equals 21, 22, or 27, and<br>RELATION TO ROADWAY (A10)<br>equals 4                             | there must be at least one NON MOTORIST LOCATION (P13) equal to 08, 18, 98, or 99.         |
|       |  |  |

**THEN** 

IF

|       | EVENT (A6) equals 21, 22, or 27   |  |
|-------|---|--|
| AA042 | FIRST HARMFUL EVENT (A6) equals 22  | PEDESTRIAN/BIKE ACCIDENT TYPE (A24) must equal 0001 - 0099.                                |
| AA051 | PEDESTRIAN/BIKE ACCIDENT<br>TYPE (A24) equals 0610 or 0620<br>and FIRST HARMFUL EVENT<br>(A6) equals 21 | RELATION TO ROADWAY (A10) must not equal 1.  |
| AA088 | FIRST HARMFUL EVENT (A6) equals 50  | RELATION TO ROADWAY (A10) must equal 1.  |
| AP001 | FIRST HARMFUL EVENT (A6) equals 21, 22, or 27, and RELATION TO ROADWAY (A10) equals 1                   | there must be at least one NON MOTORIST LOCATION (P13) equal to 01-09, 11, 12, 19, 20, 99. |
| AP002 | FIRST HARMFUL EVENT (A6) equals 21, 22, or 27, and RELATION TO ROADWAY (A10) equals 2                   | there must be at least one NON MOTORIST LOCATION (P13) equal to 08, 18, 98, or 99.         |
| AP003 | FIRST HARMFUL EVENT (A6) equals 21, 22, or 27, and RELATION TO ROADWAY (A10) equals 4                   | there must be at least one NON MOTORIST LOCATION (P13) equal to 08, 18, 98, or 99.         |
| AP004 | FIRST HARMFUL EVENT (A6)<br>equals 21, 22, or 27 and RELATION<br>TO ROADWAY (A10) equals 9              | there must be at least one NON MOTORIST LOCATION (P13) equal to 09, 19, 99.                |
| AP005 | FIRST HARMFUL EVENT (A6) equals 21  | at least one person must have PERSON TYPE (P3) equal to 4 or 5.                            |
| AP006 | FIRST HARMFUL EVENT (A6) equals 22  | at least one person must have PERSON TYPE (P3) equal to 6 or 8.                            |
| AP008 | FIRST HARMFUL EVENT (A6) equals 06  | at least one PERSON TYPE (P3) equal to 1-2, 9 must have INJURY SEVERITY (P9) equal to 1-5. |

A06

|       | IF  | THEN  |
|-------|---|---|
| AP128 | FIRST HARMFUL EVENT (A6) equals 27  | at least one PERSON TYPE (P3) must equal 4 or 8.                                  |
| AV009 | FIRST HARMFUL EVENT (A6) equals 02  | at least one vehicle should have FIRE OCCURRENCE (V16) equal to 1.                |
| AV011 | FIRST HARMFUL EVENT (A6) is not equal to 02, 06, 10, 21, 22, 27, 28   | there should be at least one vehicle with TRAVEL SPEED (V11) of 01-97, 99.        |
| AV013 | FIRST HARMFUL EVENT (A6) equals 01-10, 31 50, 58, or 59   | HIT AND RUN (V2) should not equal 1.  |
| AV022 | FIRST HARMFUL EVENT (A6) equals 21 and NUMBER OF NON MOTORISTS (A4) equals 01 and PEDESTRIAN/BIKE ACCIDENT TYPE (A24) equals 0220 | at least one MOVEMENT PRIOR TO CRITICAL EVENT (V21) must equal 07, 08, 13, or 98. |
| AV069 | FIRST HARMFUL EVENT (A6) equals 01-09 and MOST HARMFUL EVENT (V20) equals 01-09   | INITIAL POINT OF IMPACT (V24) must equal 00.                                      |
| AV070 | FIRST HARMFUL EVENT (A6) equals 26  | ACCIDENT TYPE (V23) should equal 01-11, 92, 98, or 99.                            |
| AV071 | FIRST HARMFUL EVENT (A6) equals 21, 22, or 24, and MOVEMENT PRIOR TO CRITICAL EVENT (V21) is not equal to 13                      | ACCIDENT TYPE (V23) should equal 13.  |
| AV072 | FIRST HARMFUL EVENT (A6) equals 28 or 58, and RELATION TO ROADWAY (A10) equals 1  | ACCIDENT TYPE (V23) should equal 12.  |
| AV105 | FIRST HARMFUL EVENT (A6) equals 05  | for at least one vehicle, JACKKNIFE (V14) must equal 1.                           |
| AV106 | FIRST HARMFUL EVENT (A6) equals 05  | for at least one vehicle, VEHICLE TRAILING (V13) must not equal 0.                |
| AV131 | FIRST HARMFUL EVENT (A6) equals 01-09   | at least one VEHICLE ROLE (V22) must equal 0.                                     |

|          |       | IF   | THEN  |
|----------|-------|--|---|
|          | AV132 | FIRST HARMFUL EVENT (A6) equals 02, 03, 06, 08, or 09  | at least one ACCIDENT TYPE (V23) must equal 00.                       |
|          | AV149 | FIRST HARMFUL EVENT (A6) equals 01 and there is no BODY TYPE (V5) equal to 80 89                               | at least one ROLLOVER TYPE (V30) must equal 10, 20 23, 28, 29, or 99. |
|          | AV185 | FIRST HARMFUL EVENT (A6) equals 02-03, 06-10 and MOST HARMFUL EVENT (V20) equals 02-03, 06-10                  | CRITICAL EVENT (V26) should equal 000 or 994.                         |
|          | AV214 | If FIRST HARMFUL EVENT (A6) or MOST HARMFUL EVENT (V20) equals 38  | ROLLOVER TYPE (V30) should equal 00 or 22.                            |
| <b>F</b> | AV215 | FIRST HARMFUL EVENT (A6)<br>equals 01-10   | ACCIDENT TYPE (V23) must not equal 20-91.                             |
|          | AV222 | FIRST HARMFUL EVENT (A6) equals 05 and RELATION TO ROADWAY (A10) equals 1                                      | ACCIDENT TYPE (V23) should equal 98.                                  |
|          | AV223 | FIRST HARMFUL EVENT (A6) equals 01   | ACCIDENT TYPE (V23) should equal 01-10, 97, 98, or 99.                |
|          | AV232 | FIRST HARMFUL EVENT (A6)<br>EQUALS 21-99   | no VEHICLE ROLE (V22) should equal 0.                                 |
|          | PA127 | NON MOTORIST LOCATION (P13) equals 11, 12, 18, or 19, and FIRST HARMFUL EVENT (A6) equals 21, 22 or 27         | RELATION TO JUNCTION (A9) must not equal 01 or 11.                    |
|          | VA081 | ACCIDENT TYPE (V23) equals 13  | FIRST HARMFUL EVENT (A6) must equal 21, 22, 24, or 27.                |
|          | VA086 | ACCIDENT TYPE (V23) equals 01<br>16 for one vehicle and the remaining<br>vehicles have a value of 98 for (V23) | FIRST HARMFUL EVENT (A6) must not equal 25 or 99.                     |
|          | VA087 | ACCIDENT TYPE (V23) equals 99 for one vehicle and the remaining vehicles have a value of 98 for (V23)          | FIRST HARMFUL EVENT (A6) should equal 99.                             |

|          |       | IF  | THEN   |
|----------|-------|---|--|
|          | VA093 | VEHICLE ROLE (V22) equals 2<br>and NUMBER OF MOTOR<br>VEHICLES (A3) equals 01 | FIRST HARMFUL EVENT (A6) must not equal 31-50, 58, or 59.                        |
| <b>F</b> | VA096 | NUMBER OF MOTOR VEHICLES (A3) equals 01 and VEHICLE ROLE (V22) equals 0       | FIRST HARMFUL EVENT (A6) should equal 01-10.                                     |
|          | VA137 | ACCIDENT TYPE (V23) equals 00   | FIRST HARMFUL EVENT (A6) must equal 02, 03, 06, 08, or 09.                       |
|          | VA191 | CRITICAL EVENT (V26) equals 000   | FIRST HARMFUL EVENT (A6) and MOST HARMFUL EVENT (V20) should equal 02-03, 06-10. |
|          | VA198 | INITIAL POINT OF IMPACT (A24) equals 00                                       | FIRST HARMFUL EVENT (A6) should equal 01-10.                                     |
|          | VA219 | ACCIDENT TYPE (A23) equals 20-<br>91  | FIRST HARMFUL EVENT (A6) must equal 25.  |

## A07 Manner of Collision

### **Element Values**

- 0 Not Collision With Motor Vehicle In Transport
- 1 Rear-End
- 2 Head-On
- 3 Rear-To-Rear
- 4 Angle
- 5 Sideswipe, Same Direction
- 6 Sideswipe, Opposite Direction
- 8 Other
- 9 Unknown

#### Remarks

Enter "0" (Not Collision With Motor Vehicle In Transport) when the First Harmful Event (A6) was not coded as "25" (Motor Vehicle In Transport).

Enter "1" (Rear-End) when a collision occurs between the rear of one vehicle and the front of another vehicle.

Enter "2" (Head-On) when a collision occurs between the front end of one vehicle and the front end of another vehicle.

Enter "3" (Rear-To-Rear) when a collision occurs between the rear of one vehicle and the rear of another vehicle.

**Enter "4" (Angle)** when the impact configuration is known but cannot be classified with any other element. Included here, also, are endswipes.

Enter "5" (Sideswipe, Same Direction) when the PAR reports that a sideswipe occurred while the two vehicles were traveling in the same direction.

Enter "6" (Sideswipe, Opposite Direction) when the PAR reports that a sideswipe occurred while the two vehicles were traveling in opposite directions.

Enter "8" (Other) when the First Harmful Event (A6) involves a vehicle that is parked off the roadway and an open door over the roadway is struck by a motor vehicle in transport.

|       | IF  | THEN  |
|-------|---|---|
| AA009 | FIRST HARMFUL EVENT (A6) equals 01-24, 26-46, 50, 58, or 59 | MANNER OF COLLISION (A7) must not equal 1-6.                              |
| AA010 | FIRST HARMFUL EVENT (A6) equals 25                          | MANNER OF COLLISION (A7) must not equal 0.                                |
| AA023 | FIRST HARMFUL EVENT (A6) equals 99                          | MANNER OF COLLISION (A7) should not equal 0-6.                            |
| AA031 | UNLIKELY: MANNER OF COLLIS                                  | SION (A7) is equal to 3 or 8.   |
| AA086 | MANNER OF COLLISION (A7) does not equal 0 or 8              | NUMBER OF MOTOR VEHICLES (A3) must be greater than 01.                    |
| AV014 | MANNER OF COLLISION (A7) equals 2                           | VEHICLE ROLE (V22) should equal 1 or 3.                                   |
| AV073 | MANNER OF COLLISION (A7) equals 2                           | INITIAL POINT OF IMPACT (V24) must equal 01 for two vehicles.             |
| AV074 | MANNER OF COLLISION (A7) equals 3                           | INITIAL POINT OF IMPACT (V24) must equal 04 for two vehicles.             |
| AV075 | MANNER OF COLLISION (A7) equals 1                           | at least one vehicle must have INITIAL POINT OF IMPACT (V24) equal to 01. |
| AV076 | MANNER OF COLLISION (A7) equals 1                           | at least one vehicle must have INITIAL POINT OF IMPACT (V24) equal to 04. |
| AV133 | MANNER OF COLLISION (A7) equals 3                           | at least one ACCIDENT TYPE (V23) must equal 92 or 98.                     |
| AV203 | MANNER OF COLLISION (A7) equals 5                           | ACCIDENT TYPE (V23) should not equal 20-33.                               |
| AV204 | MANNER OF COLLISION (A7) equals 5                           | ACCIDENT TYPE (V23) should equal 44-49, 98, or 99                         |
| AV205 | MANNER OF COLLISION (A7) equals 6                           | ACCIDENT TYPE (V23) should not equal 50-53.                               |

| AV206 | IF MANNER OF COLLISION (A7) equals 6   | THEN ACCIDENT TYPE (V23) should equal 64-67, 98, or 99. |
|-------|--|---|
| AV213 | If NUMBER OF MOTOR<br>VEHICLES (A3) equals 02 and<br>MANNER OF COLLISION (A7)<br>equals 2 and TRAVEL SPEED<br>(V11) is greater than 00 | VEHICLE ROLE (V22) must equal 1 or 3.                   |
| AV225 | MANNER OF COLLISION (A7) equals 2  | ACCIDENT TYPE (V23) must not equal 64-67.               |
| AV226 | MANNER OF COLLISION (A7) equals 4  | ACCIDENT TYPE (V23) must not equal 20-43 or 50-53.      |
| AV243 | MANNER OF COLLISION (A7) equals 1  | ACCIDENT TYPE (V23) should not equal 44-49.             |
| VA227 | ACCIDENT TYPE (V23) equals 20-<br>43 or 50-53  | MANNER OF COLLISION (A7) must not equal 4.              |
| VA228 | ACCIDENT TYPE (V23) equals 64-67   | MANNER OF COLLISION (A7) must not equal 2.              |

# A08 Interstate Highway

### **Element Values**

- 0 No
- 1 Yes
- 9 Unknown

### Remarks

Accidents which occur in association with a roadway (or one of its lanes) that is unopen are not NASS accidents unless they occur in the junction of a roadway that is open and upon which an involved vehicle was traveling. If the roadway is being built or under construction (repair or maintenance), then the first harmful event must have been associated with that portion of the roadway designated as open. If the maintenance agency has designated the roadway as open then the condition (paved, gravel, etc.) of the road surface is not considered. If the roadway is being built, enter the roadway according to its eventual classification.

If the road is serving as a DETOUR, then disregard temporary signs and enter the roadway according to its permanent classification. If the roadway is permanently signed (at the time of the accident) as an interstate, then enter it accordingly.

The Interstate Highway System includes those trafficways that are within the national system for interstate transport and defense purposes. Interstates typically have limited access and multiple lanes of travel.

Accidents which occur on ramps leading to or away from an Interstate should be coded "1" (Yes).

Enter "0" (No) when the PAR indicates that the accident occurred on any of the following: US Highway, State Highway, County Road, Township Road, or Municipal Road.

Enter "1" (Yes) when the PAR indicates the accident occurred on an interstate highway. Some PARs use a specific block to indicate interstate. Interstate can also be identified by the prefix "I" used in the roadway name.

| AU8 |
|-----|
|-----|

|          | AA018 | IF INTERSTATE HIGHWAY (A8) equals 1 and RELATION TO JUNCTION (A9) is not equal to 14   | THEN NUMBER OF TRAVEL LANES (A12) should not equal 1.            |
|----------|-------|--|--|
|          | AA019 | INTERSTATE HIGHWAY (A8) equals 1 and RELATION TO JUNCTION (A9) is not equal to 14      | TRAFFICWAY FLOW (A11) should not equal 3.                        |
|          | AA020 | INTERSTATE HIGHWAY (A8) equals 1   | RELATION TO JUNCTION (A9) should not equal 01-09.                |
|          | AA021 | INTERSTATE HIGHWAY (A8) equals 1   | TRAFFIC CONTROL DEVICE (A16) should not equal 01, 21, 23, 61 97. |
|          | AA022 | INTERSTATE HIGHWAY (A8) equals 1 and Relation to Junction (A9) is not equal to 14.     | SPEED LIMIT (A18) should not equal 05-40.                        |
|          | AA071 | NUMBER OF TRAVEL LANES (A12) equals 1 and RELATION TO JUNCTION (A9) is not equal to 14 | INTERSTATE HIGHWAY (A8) should not equal 1.                      |
|          | AA092 | RELATION TO JUNCTION (A9) equals 01-03, 05, 11 13                                      | INTERSTATE HIGHWAY (A8) should not equal 1.                      |
|          | AA099 | NHS ROADWAY TYPE (A26) equals 01, 11, or 21  | INTERSTATE HIGHWAY (A8) should equal 1.                          |
| <b>K</b> | AA101 | INTERSTATE HIGHWAY (A8) equals 1   | NHS ROADWAY TYPE (A26) should equal 01, 11, or 21.               |
|          | AV012 | INTERSTATE HIGHWAY (A8) equals 1   | TRAVEL SPEED (V11) should not equal 01-40.                       |
|          | VA003 | MOST HARMFUL EVENT (V20) equals 23   | INTERSTATE HIGHWAY (A8) should not equal 1.                      |

# A09 Relation To Junction

### **Element Values**

# Non-interchange Area

| 00 | Non-Junction         |
|----|----------------------|
| 01 | Intersection         |
| 02 | Intersection Related |

- 03 Driveway, Alley Access, Etc.
- 04 Entrance/Exit Ramp
- 05 Rail Grade Crossing



- 06 On A Bridge
- 08 Other, Non-interchange
- 09 Unknown, Non-interchange

#### Interchange Area

- 10 Non-Junction
- 11 Intersection
- 12 Intersection Related
- 13 Driveway Access
- 14 Entrance/Exit Ramp



- 16 On A Bridge
- 18 Other Location in Interchange
- 19 Unknown, Interchange Area
- 99 Unknown if Interchange

### Remarks

The element value selected is based on the location of the first harmful event. If the location of the first harmful event is within the boundaries of an interchange then use codes "10-19". If it occurs outside of the boundaries of an interchange, then use codes "00-09".

If the PAR indicates that the accident occurred within an interchange area, this variable should be coded with respect to the location within the interchange area (codes "10-19").

If the first harmful event occurs off the roadway, refer to the section at the point of departure to code this variable. In those off-roadway instances where the departure occurs from within a junction, enter either "00" or "10" (Non-Junction) or "02" or "12" (Intersection Related). The latter element is used if the junction is also an intersection (see definition below).

#### **Definitions**

#### **Alley Access**

An Alley Access is an unnamed roadway providing access, in general, to the rear of houses or buildings, some of which may be further served by a driveway access.

#### Crossover

A Crossover is a designated opening within a median used primarily for "U-turns". To be considered a crossover, the nearest lateral boundary line of the crossover must be greater than 10 meters from the nearest lateral boundary line of any roadway (highway, street, ramp, driveway, or alley) which intersects with either side of the roadways which the median divides.

#### **Driveway Access**

A Driveway Access is a roadway providing access to property adjacent to a trafficway.

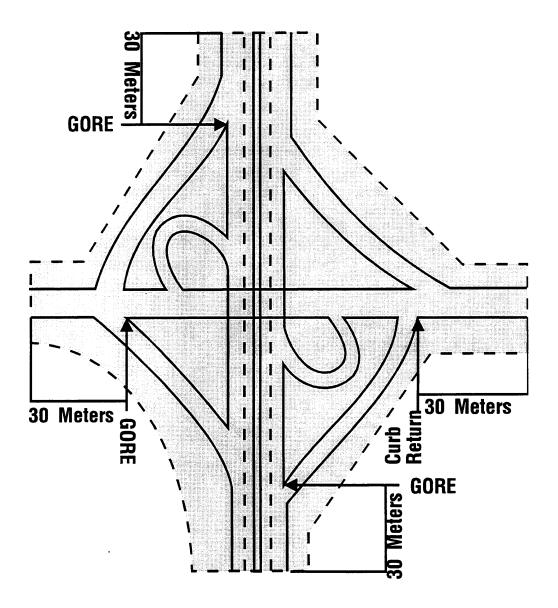
#### **Entrance or Exit Ramp**

An Entrance or Exit Ramp is a transition roadway: (1) which connects two roadways; (2) is used for entering or exiting through- traffic lanes; and (3) begins and ends at a gore or curb return. A ramp can connect two roadways which cross (either at-grade or with a grade separation) or two which do not cross (e.g., frontage roads). A ramp can form an intersection with a roadway as well as diverge from or merge into one. A ramp can form a channeled intersection. A ramp can also split into two ramps.

#### Interchange Area

The Interchange Area is the area around a grade separation which involves at least two trafficways. Included within its boundaries are: (1) all ramps which connect the roadways and (2) each roadway entering or leaving the interchange to a point 30 meters beyond the gore or curb return at the outermost ramp connection for the roadway. One may find included within an interchange area intersections, driveway accesses, and, of course, roadway sections which are non-junctions.

Figure A-1: Interchange Area



#### Intersection

Element "01" or "11", is a type of junction which: (1) contains a crossing or connection of two or more roadways not classified as a driveway access or alley access, and (2) is embraced within the prolongation of the lateral curb lines or, if none, the lateral boundary lines of the roadways. Where the distance along a roadway between two areas meeting these criteria is less than 10 meters, the two areas and the roadway connecting them are considered to be parts of a single intersection. See the examples of intersections on the following pages.

Figure A-2: 3-Leg Intersections

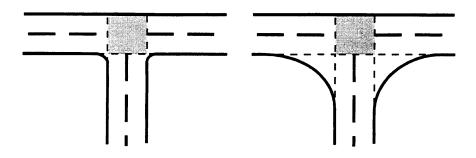


Figure A-3: 3-Leg Intersections

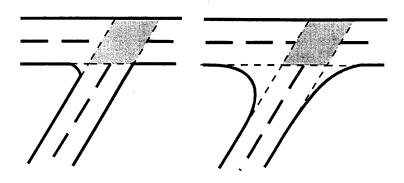


Figure A-4: 'Y' Intersection

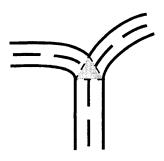


Figure A-5: 4-Leg Intersections

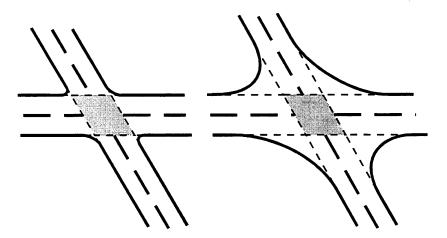


Figure A-6: 4-Leg Intersections

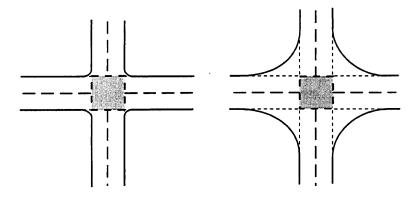


Figure A-7: 4-Leg Intersection

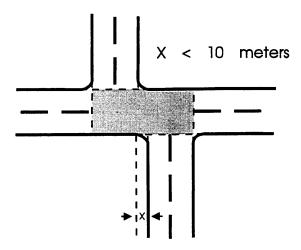
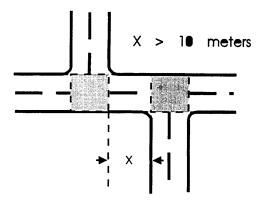


Figure A-8: Two 3-Leg Intersections



#### **Intersection Related**

Intersection Related means that the first harmful event (A6, First Harmful Event): (1) occurs on an approach to or exit from an intersection, and (2) results from an activity, behavior, or control related to the movement of traffic units through the intersection.

#### Junction

A Junction, in general, is the area formed by the connection of two roadways. It includes: (1) all at-grade intersections, (2) connections between a driveway access or alley access and a roadway which is not a driveway access or an alley access, (3) connections between two alley accesses or driveway accesses, or (4) a connection between a driveway access and an alley access.

#### Traffic Circle

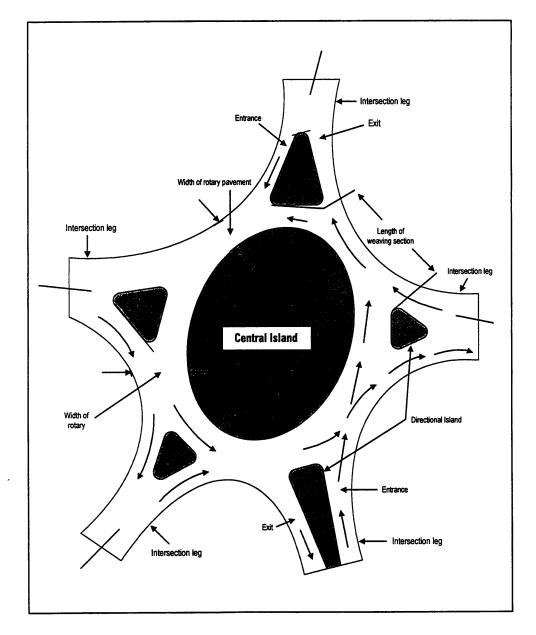
A rotary or traffic circle is a specialized form of at-grade intersection. It is one through which traffic passes by entering and leaving a one-way roadway connecting all intersection approach legs and running continuously around a central island. Rotary intersections are commonly called traffic circles, but proper design can result in central islands of various rounded shapes.

#### **Traffic Units**

Traffic Units, as referred to in Intersection Related, means any traffic unit (involved or not involved in the accident).

Enter "01" or "11" (Intersection) when the first harmful event occurs within the area formed by the prolongation of curb or edge lines of the approach legs of the intersection, enter "01" or "11" (Intersection) regardless of whether or not the collision was in any way related to an intersection.

Figure A-9: Traffic Circle



Element "01" or "11" includes any two leg intersections, rotary intersections, or traffic circles. To qualify for inclusion as a two-leg intersection, at least one of the two legs must be controlled by a regulatory sign (see A16, Traffic Control Device) or traffic signal; otherwise, treat the area as a sharp curve.

Use Element "01" or "11" if the first harmful event occurs in the rotary roadway, in the central island, or on any directional islands which serve the rotary intersection.

Enter "02" or "12" (Intersection Related) if the first harmful event occurs outside but near an intersection and involves a vehicle which was engaged or should have been engaged in making an intersection related maneuver such as turning. However, if the loss of control is unrelated to the intersection, enter "00" (Non-Junction).

If an accident meets the criteria of intersection related ("02" or "12") but also meets the criteria for codes "03" through "05" or "13" or "14", then the appropriate element ("03" through "14") takes precedence. Remember, for codes "03" or "13" (Driveway, Alley Access, Etc.) and "04" or "14" (Entrance or Exit Ramp), and "05" (Rail Grade Crossing) to apply, a pedestrian, other nonmotorist associated with a nonmotorist conveyance, or road vehicle must have been entering or exiting the appropriate area.

Enter "03" or "13" (Driveway, Alley Access, Etc.) when the first harmful event occurs on a NASS roadway (see below) which approaches or exits from the driveway or alley access junction and at least one involved pedestrian, other nonmotorist associated with a nonmotorist conveyance, or road vehicle was entering or exiting from the driveway or alley. Included are exits/entrances of parking lots. Do not use this element if the accident was precipitated by the actions of a noncontact road vehicle or person.

When a controlled driveway/alley access junction overlaps (inside-to-inside of lateral boundary lines is less than or equal to 10 meters) a three leg intersection, enter "01" or "11" (Intersection).

When an uncontrolled driveway/alley access junction is within the prolongation of a three-leg intersection and the accident would meet the criteria of driveway, alley access related (element "03" or "13"), enter either "01" or "11" (Intersection) if the first harmful event was within the intersection junction, or "02" or "12" (Intersection Related) if it was not.

For an uncontrolled driveway/alley access junction within ten (10) meters of a three or four leg intersection (inside-to-inside of lateral boundary lines), enter "03" or "13" (Driveway, Alley Access, Etc.) only if the criteria above are met and the location of the first harmful event is not within the intersection.

Enter "04" or "14" (Entrance/Exit Ramp) if the PAR has a specific element entitled similarly. If no specific PAR element matches, then use this element if according to the PAR diagram/sketch or narrative, the first harmful event occurred while going into, within, or coming out of an entrance or exit ramp.

Enter "05" (Rail Grade Crossing) when (1) the first harmful event occurred in the area formed by the at-grade connection of a railroad bed and a roadway, or (2) an involved pedestrian, other nonmotorist associated with a non-motorist conveyance, or road vehicle was on an approach to or exit from the railroad grade crossing. Do not use this code if the accident was precipitated by the actions of a noncontact road vehicle or person.



Enter "06" or "16" (On a Bridge) when the first harmful event occurs on a bridge. If the accident meets the criteria for "02" or "12" (Intersection Related) and also meets the criteria for "06" or "16" (On a Bridge), then the Bridge takes precedence.

Enter "08" (Other, Non-interchange) if the first harmful event occurs (1) while going into, within, or coming out of the channel, or (2) on the traffic island (when the PAR indicates the vehicle entered or struck the island from within the channel).

Use Element "08" when the first harmful event occurred (1) in the junction of a crossover and a roadway, (2) on any leg of the roads which approach or exit from the crossover and which are just outside of the crossover junction itself (and subject to the provision below), or (3) in the crossover itself, and at least one conveyance, or road vehicle was entering, in, or exiting from the crossover. Do not use this code if the accident was precipitated by the actions of a noncontact road vehicle or person.

Element "08" includes an at-grade channel. A channel refers to any traffic lane that is directed into a path different than the through lanes by a traffic island. An island is defined as a raised or painted paved surface. The channel begins and ends at the extension of the island's lateral boundaries unless the channel is preceded or followed by a merge area or divergence. See figures A-10 to A-13 for examples.

Median cuts which are directly across from or within 10 meters of the nearest lateral boundary line of any roadway (highway, street, ramp, driveway, or alley) are considered extensions of the roadway. The area between the roadways which the median cut serves is considered part of the junction unless the roadways belong to separate trafficways. In this rare latter case, consider the area as a separate road segment. If the location of the first harmful event is in the median cut, enter the appropriate response: "01" or "11" (Intersection) or "03" or "13" (Driveway, Alley Access, Etc.).



Enter "18" (Other, Interchange) if the first harmful event occurs in a median crossing area within an interchange.

Figure A-10: Channel

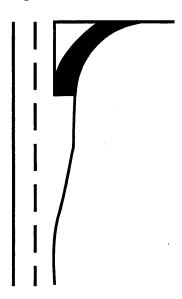


Figure A-11: Channel

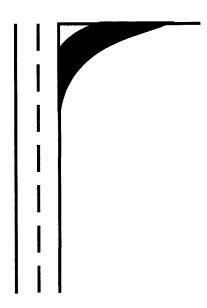


Figure A-12: Channel

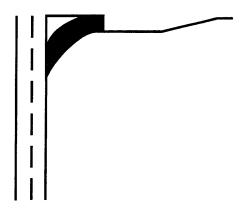
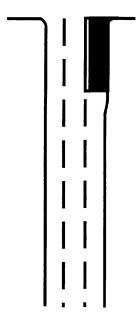


Figure A-13: Channel



|       |  | A09  |
|-------|--|--|
|       | IF   | THEN   |
| AA015 | RELATION TO JUNCTION (A9) equals 00 or 10  | TRAFFIC CONTROL DEVICE (A16) must not equal 01.          |
| AA018 | INTERSTATE HIGHWAY (A8) equals 1 and RELATION TO JUNCTION (A9) is not equal to 14                        | NUMBER OF TRAVEL LANES (A12) should not equal 1.         |
| AA019 | INTERSTATE HIGHWAY (A8) equals 1 and RELATION TO JUNCTION (A9) is not equal to 14                        | TRAFFICWAY FLOW (A11) should not equal 3.                |
| AA020 | INTERSTATE HIGHWAY (A8) equals 1   | RELATION TO JUNCTION (A9) should not equal 01-09.        |
| AA022 | INTERSTATE HIGHWAY (A8) equals 1   | SPEED LIMIT (A18) should not equal 05-40.                |
| AA025 | FIRST HARMFUL EVENT (A6) equals 23   | RELATION TO JUNCTION (A9) should equal 05.               |
| AA026 | RELATION TO JUNCTION (A9) equals 05  | TRAFFIC CONTROL DEVICE (A16) should equal 61 or 62.      |
| AA038 | PEDESTRIAN/BIKE ACCIDENT<br>TYPE (A24) equals 0810, 0821,<br>0822, 0829, 0830, 0840, or 0890             | RELATION TO JUNCTION (A9) must not equal 01 or 11.       |
| AA043 | PEDESTRIAN/BIKE ACCIDENT<br>TYPE (A24) equals 0001, 0002, or<br>0008                                     | RELATION TO JUNCTION (A9) must equal 03 or 13.           |
| AA044 | PEDESTRIAN/BIKE ACCIDENT<br>TYPE (A24) equals 0005, 0006,<br>0007, 0010, 0012, 0025, 0048,<br>0049, 0055 | RELATION TO JUNCTION (A9) must equal 01 or 11.           |
| AA050 | PEDESTRIAN/BIKE ACCIDENT<br>TYPE (A24) equals 0003, 0018,<br>0019, 0021, 0022, 0023, 0024                | RELATION TO JUNCTION (A9) should not equal 00 or 10.     |
| AA071 | NUMBER OF TRAVEL LANES<br>(A12) equals 1 and RELATION TO<br>JUNCTION (A9) is not equal to 14             | INTERSTATE HIGHWAY (A8) should not equal 1.              |
| AA085 | TRAFFIC CONTROL DEVICE (A16) equals 01, 21, or 22  | RELATION TO JUNCTION (A9) must not equal 00 or 10.       |
| AA087 | RELATION TO ROADWAY (A10) equals 3   | RELATION TO JUNCTION (A9) should not equal 01 or 11.     |
| AA090 | PEDESTRIAN/BIKE ACCIDENT<br>TYPE (A24) equals 0005, 0009,<br>0010, 0012, 0025, 0049, or 0055.            | RELATION TO JUNCTION (A9) must not equal 00.             |
| AA091 | PEDESTRIAN/BIKE ACCIDENT<br>TYPE (A24) equals 0005, 0009,<br>0010, 0012, 0025, 0049, or 0055             | RELATION TO JUNCTION (A9) should equal 01, 02, 11 or 12. |

|       | IF  | THEN  |
|-------|---|---|
| AA092 | RELATION TO JUNCTION (A9) equals 01-03, 05, 11-13   | INTERSTATE HIGHWAY (A8) should not equal 1.   |
| AA096 | If TRAFFIC CONTROL DEVICE (A16) equals 61 or 62   | RELATION TO JUNCTION (A9) should equal 05.  |
| AA100 | RELATION TO JUNCTION (A9) equals 01-09  | NHS ROADWAY TYPE (A26) should not equal 01, 11, or 21.  |
| AP023 | RELATION TO JUNCTION (A9) equals 01 or 11 and at least one PERSON TYPE (P3) equals 5                            | PEDESTRIAN/BIKE ACCIDENT<br>TYPE (A24) must not equal 0810,<br>0821, 0822, 0829, 0830, 0840 or<br>0890. |
| AP039 | RELATION TO JUNCTION (A9) equals 01, 02, 11 or 12, and at least one PERSON TYPE (P3) equals 5                   | PEDESTRIAN/BIKE ACCIDENT<br>TYPE (A24) should equal 0710,<br>0720, 0730, 0740, 0750, 0760, 0790.        |
| AP135 | RELATION TO JUNCTION (A9) equals 03 or 13 and NUMBER OF NON MOTORISTS (A4) is greater than 00                   | NON MOTORIST LOCATION (P13) should not equal 01, 02, 08 or 09.  |
| AV134 | RELATION TO JUNCTION (A9) equals 03 or 13   | at least one MOVEMENT PRIOR TO CRITICAL EVENT (V21) should equal 10, 11, or 98.                         |
| PA127 | NON MOTORIST LOCATION<br>(P13) equals 11, 12, 18, or 19, and<br>FIRST HARMFUL EVENT (A6)<br>equals 21, 22 or 27 | RELATION TO JUNCTION (A9) must not equal 01 or 11.  |
| PA130 | NON MOTORIST LOCATION (P13) equals 01, 02, 08, or 09  | RELATION TO JUNCTION (A9) should equal 01, 02, 11, or 12.   |
| VA004 | MOST HARMFUL EVENT (V20) equals 23  | RELATION TO JUNCTION (A9) should equal 05.  |
| VA082 | ACCIDENT TYPE (V23) equals 68 91  | RELATION TO JUNCTION (A9) should not equal 00.  |
| VA139 | ACCIDENT TYPE (V23) equals 14   | RELATION TO JUNCTION (A9) must not equal 01 or 11.  |
| VA140 | ACCIDENT TYPE (V23) equals 14   | RELATION TO JUNCTION (A9) should equal 00, 02, 10 or 12.  |
| VA189 | CRITICAL EVENT (V26) equals<br>410 460, 710-760 and<br>CORRECTIVE ACTION<br>ATTEMPTED (V27) equals 00           | RELATION TO JUNCTION (A9) should not equal 00 or 10.  |
| VA190 | CRITICAL EVENT (V26) equals<br>430-459, 730-759 and<br>CORRECTIVE ACTION<br>ATTEMPTED (V27) equals 00           | RELATION TO JUNCTION (A9) should equal 03 or 13.  |
| VA242 | MOVEMENT PRIOR TO CRITICAL<br>EVENT (V21) equals 10 or 11   | RELATION TO JUNCTION (A9) should not equal 00 or 10.  |

# A10 Relation To Roadway

### **Element Values**

- 1 On Roadway
- 2 On Shoulder/Parking Lane
- 3 Off Roadway/Shoulder/Parking Lane
- 4 On Median
- 8 Other
- 9 Unknown

#### Remarks

Enter the element that best describes the location of the First Harmful Event (A6).

Enter "1" (On Roadway) when an accident occurs on that part of the trafficway designated, improved and ordinarily used for motor vehicle travel. In addition, use this element if the impact occurs with a bridge structure that is on a roadway and was designed to allow motor vehicles to move in (change lanes) between the supporting piers.

**Note:** This code may not be used when a vehicle in-transport on a roadway impacts another vehicle (not in-transport) or its cargo where the cargo protrudes onto the roadway (e.g., side mirrors or a door opened from a parked vehicle in a parking lane).

Struck signs, poles or trees can be located on a roadway ("1"). The objects should not be within an island or median, but actually protruding from the roadway surface or hanging over the roadway surface. The occurrence of a struck sign, pole or tree on a roadway will be rare.

Enter "2" (On Shoulder/Parking Lane) when an accident occurs on a shoulder or in a parking lane. Shoulders are defined as that part of a trafficway contiguous with the roadway for emergency use, for accommodation of stopped vehicles, and for lateral support of the roadway structure. A parking lane is an area of the trafficway designated either implicitly or explicitly for the storage of motor vehicles not in-transport. Parking can be either parallel or nonparallel (e.g., angular).

Enter "3" (Off Roadway/Shoulder/Parking Lane) when the first harmful event occurred on a trafficway but did not occur on a roadway, shoulder, parking lane, or median. Use this element if the first harmful event occurred in a gore or an island (directional or channeling). In addition, use this element if the first harmful event occurred in a location off the roadway, but its relationship to the right-of-way is not known. For example, the PAR indicates that a guardrail, tree, mailbox, etc., was impacted. Use this element since the shoulder is assumed to end where the object begins. In addition, this element is coded when a vehicle strikes a curb which is contiguous with either the roadway or a parking lane at the location of the impact.

**Gore** is an area of land where two roadways diverge or converge. The area is bounded on two sides by the edges of the roadways, which join at the point of divergence or convergence. The direction of traffic must be the same on both of these roadways. The area includes shoulders or

marked pavement, if any, between the roadways. Inclusions are: areas at rest area entry or exit ramps, areas at truck weigh station entry or exit ramps, areas where two main roadways diverge or converge, areas where a ramp and another roadway, or two ramps, diverge or converge, and areas where a frontage road and another roadway, or two frontage roads, diverge or converge. Normally one of the roadways will be a ramp.

**Channel Island** is the defined area between traffic lanes for control and guidance of vehicle movement. Islands may be provided for separation and special control of turning movements. Islands can separate opposing traffic or traffic in the same direction. An island may be designated by paint, curbs or pavement edge and can be paved or have a low growing plant cover.

Enter "4" (On Median) when the first harmful event occurs in a median. A median is defined as an area of separation between two adjacent roadways on the same trafficway and is not a "gore". More than one "median" may exist on the same trafficway. Also, use this element if the first harmful event occurs with a curb which is part of a curbed median. In addition, enter this element if the impact occurs with a bridge structure (see note above) that was designed to separate (or has the same secondary effect) opposing lanes of travel or prevent motor vehicles from changing lanes.

Enter "8" (Other) when the location of the first harmful event occurred off of a trafficway (e.g., on private property that is not a roadway, in a private driveway, etc.).

Use Element "8" when a vehicle in-transport on a roadway impacts another vehicle (not in-transport) or its cargo where the cargo protrudes onto the roadway (e.g., side mirrors or a door opened from a parked vehicle in a parking lane).

THEN

## **Consistency Check**

16

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|       | iF   | IHEN   |
|-------|--|--|
| AA008 | RELATION TO ROADWAY (A10) equals 4   | TRAFFICWAY FLOW (A11) must not equal 1, 3, or 9.   |
| AA012 | FIRST HARMFUL EVENT (A6) equals 26   | RELATION TO ROADWAY (A10) must not equal 1.  |
| AA024 | FIRST HARMFUL EVENT (A6) equals 31-46, 58 or 59  | RELATION TO ROADWAY (A10) should not equal 1.  |
| AA039 | PEDESTRIAN/BIKE ACCIDENT<br>TYPE (A24) equals 0410, 0420, or<br>0430, and FIRST HARMFUL<br>EVENT (A6) equals 21, 22, or 27 | RELATION TO ROADWAY (A10) must equal 1.  |
| AA051 | PEDESTRIAN/BIKE ACCIDENT<br>TYPE (A24) equals 0610 or 0620<br>and FIRST HARMFUL EVENT<br>(A6) equals 21                    | RELATION TO ROADWAY (A10) must not equal 1.  |
| AA087 | RELATION TO ROADWAY (A10) equals 3   | RELATION TO JUNCTION (A9) should not equal 01 or 11.                                     |
| AA088 | FIRST HARMFUL EVENT (A6) equals 50   | RELATION TO ROADWAY (A10) must equal 1.  |
| AP001 | FIRST HARMFUL EVENT (A6)<br>equals 21, 22, or 27, and<br>RELATION TO ROADWAY (A10)<br>equals 1                             | there must be at least one NON MOTORIST LOCATION (P13) equal to 01-09, 11-12, 19-20, 99. |

|       | iF  | THEN  |
|-------|---|---|
| AP002 | FIRST HARMFUL EVENT (A6) equals 21, 22, or 27, and RELATION TO ROADWAY (A10) equals 2   | there must be at least one NON MOTORIST LOCATION (P13) equal to 08, 18, 98, or 99.  |
| AP003 | FIRST HARMFUL EVENT (A6) equals 21, 22, or 27, and RELATION TO ROADWAY (A10) equals 4   | there must be at least one NON MOTORIST LOCATION (P13) equal to 08, 18, 98, or 99.  |
| AP004 | FIRST HARMFUL EVENT (A6) equals 21, 22, or 27 and RELATION TO ROADWAY (A10) equals 9  | there must be at least one NON MOTORIST LOCATION (P13) equal to 09, 19, or 99.      |
| AP040 | RELATION TO ROADWAY (A10) is not equal to 1 and at least one PERSON TYPE (P3) equals 5  | PEDESTRIAN/BIKE ACCIDENT<br>TYPE (A24) should equal 0610,<br>0620, 0910, or 0920.   |
| AV072 | FIRST HARMFUL EVENT (A6) equals 28 or 58, and RELATION TO ROADWAY (A10) equals 1  | ACCIDENT TYPE (V23) should equal 12.  |
| AV097 | RELATION TO ROADWAY (A10) equals 4 and NUMBER OF MOTOR VEHICLES (A3) equals 01  | ACCIDENT TYPE (V23) should equal 06-10, 98, 99.                                     |
| AV184 | NUMBER OF MOTOR VEHICLES (A3) equals 01 and RELATION TO ROADWAY (A10) equals 2 or 3 and CORRECTIVE ACTION ATTEMPTED (V27) equals 00 | CRITICAL EVENT (V26) should equal 010-060, 099, 100, 101, 102, 199, or <i>994</i> . |
| AV186 | RELATION TO ROADWAY (A10) equals 3 or 8 and CORRECTIVE ACTION ATTEMPTED (V27) is not equal to 00 or 94 or 99                        | PRECRASH LOCATION (V29)<br>should equal 04.   |
| AV222 | FIRST HARMFUL EVENT (A6)<br>equals 05 and RELATION TO<br>ROADWAY (A10) equals 1   | ACCIDENT TYPE (V23) should equal 98.  |
| VA094 | ACCIDENT TYPE (V23) equals 01-11, 14  | RELATION TO ROADWAY (A10) should not equal 1.                                       |
| VA138 | ACCIDENT TYPE (V23) equals 06<br>10 and TRAFFICWAY FLOW<br>(A11) equals 2   | RELATION TO ROADWAY (A10) should equal 4.   |
| VA181 | PRECRASH LOCATION (V29) equals 04   | RELATION TO ROADWAY (A10) should not equal 1.                                       |
| VA182 | PRECRASH LOCATION (V29) equals 01, 02, or 03  | RELATION TO ROADWAY (A10) should equal 1.   |
| VA211 | ACCIDENT TYPE (V23) equals 97   | RELATION TO ROADWAY (A10) should equal 1.   |
| VA216 | PRECRASH LOCATION (V29) equals 06   | RELATION TO ROADWAY (A10) should not equal 1.                                       |
| VA217 | PRECRASH LOCATION (V29)<br>equals 07  | RELATION TO ROADWAY (A10) should equal 1.   |

# **A11 Trafficway Flow**

### **Element Values**

- 1 Not Physically Divided (Two Way Trafficway)
- 2 Divided Highway, (Median Strip, Barrier, Etc.)
- 3 One Way Trafficway
- 9 Unknown

### Remarks

Enter "1" [Not Physically Divided (Two Way Trafficway)] when the PAR indicates that the trafficway was not divided and traffic travels in opposing directions.

Although gores separate roadways and traffic islands (associated with channels) separate travel lanes, neither is involved in the determination of trafficway flow.

Enter "2" [Divided Highway, (Median Strip, Barrier, Etc.)] whenever a trafficway division is reported. It is presumed that the traffic travels in but one direction on the roadway associated with the location of the first harmful event.

Enter "3" (One Way Trafficway) whenever the trafficway is undivided and traffic flows in but one direction (e.g., one-way streets). However, this code can also be used where a median is present so long as all the traffic on the trafficway goes in the same direction. An example occurs where the opposing roadway of the same named trafficway had to be split by such a distance that the right-of-way divides to accommodate other property.

Use this code for entrance/exit ramps where traffic is permitted to flow in only one direction.

## **Consistency Check**

### A11

|        | IF  | THEN   |
|--------|---|--|
| AA008  | RELATION TO ROADWAY (A10) equals 4  | TRAFFICWAY FLOW (A11) must not equal 1, 3, or 9. |
| AA019  | INTERSTATE HIGHWAY (A8) equals 1 and RELATION TO JUNCTION (A9) is not equal to 14 | TRAFFICWAY FLOW (A11) should not equal 3.        |
| AA027  | TRAFFICWAY FLOW (A11) equals 1 or 2   | NUMBER OF TRAVEL LANES (A12) should not equal 1. |
| AA 102 | NUMBER OF TRAVEL LANES<br>(A12) equals 7  | TRAFFICWAY FLOW (A11) should not equal 2.        |
| VA138  | ACCIDENT TYPE (V23) equals<br>06-10 and TRAFFICWAY FLOW<br>(A11) equals 2         | RELATION TO ROADWAY (A10) should equal 4.        |

# **A12 Number Of Travel Lanes**

### **Element Values**

- 1 One Lane
- 2 Two Lanes
- 3 Three Lanes
- 4 Four Lanes
- 5 Five Lanes
- 6 Six Lanes
- 7 Seven Or More Lanes
- 9 Unknown

### **Remarks**

Enter the element value indicated on the PAR.

If traffic flows in both directions and is undivided, code the number of lanes in both directions. If the trafficway is divided into two or more roadways, code only the number of lanes for the roadway on which the vehicle which precipitated the accident was traveling. Note that this number may be different from that reported on the PAR when the trafficway is divided.

**Enter "9" (Unknown)** if no information is contained on the PAR or the information on the PAR is inadequate for choosing one of the other elements.

|          |        |  | A12   |
|----------|--------|--|---|
|          | AA018  | IF INTERSTATE HIGHWAY (A8) equals 1 and RELATION TO JUNCTION (A9) is not equal to 14   | THEN NUMBER OF TRAVEL LANES (A12) should not equal 1. |
|          | AA027  | TRAFFICWAY FLOW (A11) equals 1 or 2  | NUMBER OF TRAVEL LANES (A12) should not equal 1.      |
| <b>F</b> | AA071  | NUMBER OF TRAVEL LANES (A12) equals 1 and RELATION TO JUNCTION (A9) is not equal to 14 | INTERSTATE HIGHWAY (A8) should not equal 1.           |
|          | AA 102 | NUMBER OF TRAVEL LANES<br>(A12) equals 7   | TRAFFICWAY FLOW (A11) should not equal 2.             |
|          | VA183  | PRECRASH LOCATION (V29) equals 02  | NUMBER OF TRAVEL LANES (A12) should not equal 1.      |

# A13 Roadway Alignment

### **Element Values**

- 1 Straight
- 2 Curve
- 9 Unknown

### **Remarks**

Enter the element value indicated on the PAR.

**Enter "1" (Straight)** if the PAR indicates the location of the First Harmful Event occurred on a straight section of roadway.

**Enter "2" (Curve)** if the PAR indicates the location of the First Harmful Event occurred on a curved section of roadway.

**Enter "9" (Unknown)** if no information is contained on the PAR or the information on the PAR is inadequate for choosing one of the other elements.

## **Consistency Check**

VA090

**A13** 

IF

MOVEMENT PRIOR TO CRITICAL EVENT (V21) equals

THEN

ROADWAY ALIGNMENT (A13) must equal 2.

# **A14 Roadway Profile**

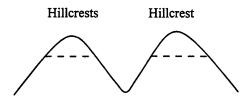
### **Element Values**

- 1 Level
- 2 Grade
- 3 Hillcrest
- 8 Other
- 9 Unknown

### Remarks

Enter the element value indicated on the PAR.

**Element "3" (Hillcrest)** refers the area of transition between an upgrade and a downgrade as in the following examples:



**Element "8" (Other)** refers to any other profile description indicated on the PAR; for example, a "sag".

**Enter "9" (Unknown)** if no information is contained on the PAR or the information on the PAR is inadequate for choosing one of the other elements.

# **A15 Roadway Surface Condition**

### **Element Values**

- 1 Dry
- 2 Wet
- 3 Snow Or Slush
- 4 Ice (Use If Snow/Ice Combined)
- 5 Sand, Dirt, Oil
- 8 Other
- 9 Unknown

### **Remarks**

Enter the element value indicated on the PAR.

A road made of sand or dirt would be coded "1" (dry) under normal conditions, not coded "5" (sand, dirt, oil).

**Enter "9" (Unknown)** if no information is contained on the PAR or the information on the PAR is inadequate for choosing one of the other elements.

|       |   | A15   |
|-------|---|---|
|       | IF  | THEN  |
| AA028 | ATMOSPHERIC CONDITION (A20) equals 2-4, 67  | ROADWAY SURFACE<br>CONDITION (A15) should not equal<br>1, 5, 8, or 9. |
| AA035 | MONTH (A1) equals 05-09                     | ROADWAY SURFACE<br>CONDITION (A15) should not equal<br>3 or 4.        |
| AA084 | ROADWAY SURFACE<br>CONDITION (A15) equals 1 | ATMOSPHERIC CONDITION (A20) should not equal 2, 3, 4, 6, or 7.        |
| AD091 | ROADWAY SURFACE<br>CONDITION (A15) equals 1 | DRIVER'S VISION OBSCURED BY (D4) should not equal 08.                 |

## A16 Traffic Control Device

# **Element Values**

00 No Controls

#### **Not At Railroad Grade Crossing**

#### **Trafficway Traffic Signals**

- 01 Traffic Control Signal (On Colors)
- 04 Flashing Traffic Control Signal Or Flashing Beacon
- 08 Other Traffic Signal
- 09 Unknown Traffic Signal

#### Regulatory, School Zone Signs

- 21 Stop Sign
- 22 Yield Sign
- 23 School Zone Related Sign
- 28 Other Sign
- 29 Unknown Sign

#### **Warning Signs**

- 40 Advisory Speed Sign
- Warning Sign For Road Conditions (Hill, Steep Grade etc.)
- 42 Warning Sign For Road Construction
- Warning Sign For Environment/Traffic (Fog Ahead, Wind, Accident Ahead)
- 49 Unknown Type Warning Sign

#### Miscellaneous Not At Railroad Crossing

51 Officer, Crossing Guard, Flagman, Etc.

#### At Railroad Grade Crossing

- 61 Active Device At RR Crossing (e.g., Gates, Flashing Lights, Traffic Signal)
- Passive Device At RR Crossing (e.g., Stop Sign, Cross Bucks)

- 97 Traffic Control Present No Details
- 98 Other Traffic Control (Whether Or Not At RR Grade Crossing)
- 99 Unknown

#### Remarks

This variable measures controls which regulate vehicular traffic. Excluded are any controls which solely regulate pedestrians (e.g., Walk/Wait signals).

Pavement markings are used to supplement the regulations or warnings of other devices such as traffic signs or signals. In other instances, they are used alone and produce results that cannot be obtained by the use of any other device. Pavement markings can convey warnings or information to the driver without diverting his attention from the roadway. However, pavement markings are not considered as traffic control devices for the purposes of this variable and are not entered.

Guide signs do not constitute traffic controls.

Enter the element value indicated on the PAR if it directly matches.

**Enter "00" (No Controls)** if at the time of the accident there was no intent to control (regulate or warn) vehicle traffic. Use this element if statutory controls apply (e.g., state law requires that when two vehicles meet at an uncontrolled intersection, the one on the right has the right-of-way).

The elements are prioritized in decreasing numerical value (i.e., "01" takes precedence over "04", "04" over "08", etc.--see exception associated with code "51"). Elements are grouped generally into those "not at railroad grade crossing" ("01" through "51") and those "at railroad grade crossing" ("61" and "62"). This means that highway traffic signals take precedence over regulatory signs, school zone signs and warning signs. Regulatory signs take precedence over school and warning signs. School signs take precedence over warning signs. Likewise, active (railroad crossing) devices take precedence over passive devices. If a school guard, police officer, or other officially-designated person controls both pedestrian and vehicular traffic, enter "51" (Officer, Crossing Guard, Flagman, Etc.). Any officially-designated person ("51") takes precedence over values "00" through "49".

Enter "01" [Traffic Control Signal (On Colors)...] if the PAR indicates a signal which processes through the green, amber, and red cycles. The source of actuation is of no concern.

Enter "04" (Flashing Traffic Control Signal Or Flashing Beacon) if (1) the signal has green, amber, and red cycle capability but is being used to flash amber/red only, or (2) the device is capable of only flashing amber/red signals.

Enter "23" (School Zone Related Sign) when the first harmful event occurred during the time the sign was in effect. If the sign was in effect, it does not matter whether or not children were present.

Element "28" (Other Sign) includes speed limit signs, movement signs (e.g., NO TURN, LEFT TURN ONLY, DO NOT PASS, PASS WITH CARE, KEEP RIGHT, DO NOT ENTER, WRONG WAY, ONE WAY), parking signs (e.g., NO PARKING, EMERGENCY PARKING ONLY), and other miscellaneous signs (e.g., STOP HERE ON RED, NO TURN ON RED, ROAD CLOSED TO THRU TRAFFIC, WEIGHT LIMIT..., TRUCK ROUTE).

**Elements "40-49" (Warning Signs)** include any black on orange diamond shaped sign or any black on yellow diamond shaped sign. Some black on yellow horizontal rectangular or vertical rectangular signs are also included.

Elements "61" [Active Device At RR Crossing (Gates, Flashing Lights, Traffic Control Signal)] and "62" [Passive Device At RR Crossing (Stop Sign, Cross Bucks, Etc.)] should only be used when the first harmful event occurs in the area of a roadway and a railroad bed [i.e., A9, Relation To Junction, equals "05" (Railroad Grade Crossing)]. Elements "01" through "49" should be used when the first harmful event occurs anywhere else (i.e., A9 equals "00" through "04", "08-19").

Enter "61" [Active Device At RR Crossing (e.g., Gates, Flashing Lights, Traffic Control Signal)] when the PAR reports that the railroad crossing was guarded by a gate, a flashing light, a traffic control signal, a bell, or any combination thereof.

Enter "62" [Passive Device At RR Crossing (e.g., Stop Sign, Cross Bucks, Etc.)] when the PAR indicates that no train activated devices were present. Cross bucks are a large "X", with the words RAILROAD CROSSING spelled out on the "X". A railroad advance warning sign is a circle with black "X" on a yellow background.

Element "98" [Other Traffic Control (Whether Or Not At RR Grade Crossing)] includes: (1) a school bus with flashers activated where vehicles are required to stop, or (2) any other device which (a) functions as a traffic control device which is not listed as an element of this variable and (b) is not excluded by the manual and (c) is related to the accident. Some examples are: barricades, cones, drums, and object markers.

When a traffic control is deactivated (e.g., traffic signal that emits no signals) during certain times of the day and was deactivated at the time of the accident, enter "00" (No Controls). A traffic control that has just been installed and not yet activated is also entered "00". However, a traffic control that is out (e.g., due to a power failure) and was reported as such on the PAR is entered, unless a temporary control [e.g., stop sign ("21"), police officer ("51", etc.] has been inserted, in which case the temporary control should be entered.

**Enter "99" (Unknown)** if no information is contained on the PAR or the information on the PAR is inadequate for choosing one of the other elements.

## **Consistency Check**

| IF THEN  |        |
|--|--------|
| AA011 FIRST HARMFUL EVENT (A6) TRAFFIC CONTROL DEVI  |        |
| equals 23 (A16) must not equal 01-51,                | 98.    |
| AA015 RELATION TO JUNCTION (A9) TRAFFIC CONTROL DEVI | CE     |
| equals 00 or 10 (A16) must not equal 01.             |        |
| AA021 INTERSTATE HIGHWAY (A8) TRAFFIC CONTROL DEVI   |        |
| equals 1 (A16) should not equal 01, 2 61-97.         | 1, 23, |
| AA026 RELATION TO JUNCTION (A9) TRAFFIC CONTROL DEVI |        |
| equals 05 (A16) should equal 61 or 62.               |        |
| AA040 PEDESTRIAN/BIKE ACCIDENT TRAFFIC CONTROL DEVI  | CE     |

A 4 C

|       | IF  | THEN  |
|-------|---|---|
| AA041 | PEDESTRIAN/BIKE ACCIDENT<br>TYPE (A24) equals 0740  | TRAFFIC CONTROL DEVICE (A16) should equal 01, 04, 08, 09, or 99.  |
| AA045 | PEDESTRIAN/BIKE ACCIDENT<br>TYPE (A24) equals 0005, 0006,<br>0007, 0009, 0010, 0012, or 0055                      | TRAFFIC CONTROL DEVICE (A16) must not equal 00.   |
| AA046 | PEDESTRIAN/BIKE ACCIDENT<br>TYPE (A24) equals 0006, 0007,<br>0010   | TRAFFIC CONTROL DEVICE (A16) must equal 01, 04, 08, or 09.  |
| AA047 | PEDESTRIAN/BIKE ACCIDENT<br>TYPE (A24) equals 0005  | TRAFFIC CONTROL DEVICE (A16) must equal 04 or 21.   |
| AA048 | PEDESTRIAN/BIKE ACCIDENT<br>TYPE (A24) equals 0012, or 0055   | TRAFFIC CONTROL DEVICE (A16) must equal 01, 04, 08, 09, 21, 22, 28, or 29.  |
| AA049 | PEDESTRIAN/BIKE ACCIDENT<br>TYPE (A24) equals 0025  | TRAFFIC CONTROL DEVICE (A16) should equal 00.   |
| AA085 | TRAFFIC CONTROL DEVICE (A16) equals 01, 21, or 22   | RELATION TO JUNCTION (A9) must not equal 00 or 10.  |
| AA096 | If TRAFFIC CONTROL DEVICE (A16) equals 61 or 62   | RELATION TO JUNCTION (A9) should equal 05.  |
| AA097 | WORK ZONE (A25) equals 1  | TRAFFIC CONTROL DEVICE (A16) should equal 01-42, 51 or 98.  |
| AA098 | TRAFFIC CONTROL DEVICE<br>(A16) equals 42   | WORK ZONE (A25) should equal 1.   |
| AP054 | TRAFFIC CONTROL DEVICE (A16) equals 01, 04, 08, 09, 21, 22, 28, or 29, and at least one PERSON TYPE (P3) equals 6 | PEDESTRIAN/BIKE ACCIDENT<br>TYPE (A24) should equal 0005-<br>0007, 0009, 0010, 0012, 0018, 0019,<br>0021 0024, 0048, 0049, 0054 or<br>0055. |
| DA123 | VIOLATIONS CHARGED (D2) equals 07   | TRAFFIC CONTROL DEVICE (A16) should equal 01-09, 21, 97, 98, or 99.   |
| VA005 | MOST HARMFUL EVENT (V20) equals 23  | TRAFFIC CONTROL DEVICE (A16) should not equal 01-51.  |

# A18 Speed Limit

### **Element Values**

Range: 00 through 65, 99 00 No Statutory Limit

05-65 Actual Speed Limit (MPH--in increments of 5)

99 Unknown

#### Remarks

Disregard advisory or other speed signs which do not indicate the legal speed limit. Furthermore, do not confuse advisory signs on entrance/exit ramps or near intersections with the actual legal maximum speed limit.

If a state has a statute that uniformly reduces the maximum allowable speed within or near a construction zone, then code the indicated reduced limit.

Enter "00" (No Statutory Limit) on roadways which have no statutory limit (e.g., parking lot roadways or entrance/exits, service station entrance/exits, or driveways, etc.).

## **Consistency Check**

AA022

**A18** 

IF

TERSTATE HIGHWAY (AS)

INTERSTATE HIGHWAY (A8) equals 1 and is not equal to 14.

SPEED LIMIT (A18) should not equal 05-40.

**THEN** 

# **A19 Light Condition**

### **Element Values**

- 1 Daylight
- 2 Dark
- 3 Dark But Lighted
- 4 Dawn
- 5 Dusk
- 6 Dawn Or Dusk (If Not Separated)
- 9 Unknown

### Remarks

If the police report contains more than one coded, shaded, or checked response for light conditions (e.g., "dark" and "dusk"), then enter Unknown, ("9").

When dawn and dusk are both marked on the PAR, use the time of day to select either "4" (dawn) or "5" (dusk).

|       | IF  | THEN   |
|-------|---|--|
| AA001 | LIGHT CONDITION (A19) equals 4 and TIME DESIGNATOR (A2A) equals A | TIME (A2) must not equal 1000 1159, 1199.                |
| AA002 | LIGHT CONDITION (A19) equals 5 and TIME DESIGNATOR (A2A) equals P | TIME (A2) must not equal 1200 0200, 0299, 1000-1200.     |
| AA003 | LIGHT CONDITION (A19) equals 5 and TIME DESIGNATOR (A2A) equals M | TIME (A2) must not equal 2200-<br>2400, 0001 1400, 1499. |
| AA006 | TIME (A2) equals 1000-1500 and TIME DESIGNATOR (A2A) equals M     | LIGHT CONDITION (A19) should equal 1, 9.                 |

| AA052   | IF<br>TIME(A2) equals 1000-1159, 1199<br>and TIME DESIGNATOR (A2A)<br>equals A       | THEN LIGHT CONDITION (A19) should equal 1, 9.            |
|---------|--|--|
| AA053   | TIME (A2) equals 1200-0300 and TIME DESIGNATOR (A2A) equals P                        | LIGHT CONDITION (A19) should equal 1, 9.                 |
| AA054   | TIME (A2) equals 1000-1159, 1199<br>and TIME DESIGNATOR (A2A)<br>equals P            | LIGHT CONDITION (A19) should equal 2, 3, 9.              |
| AA055   | TIME (A2) equals 1200-0300 and TIME DESIGNATOR (A2A) equals A                        | LIGHT CONDITION (A19) should equal 2, 3, 9.              |
| AA057   | TIME (A2) equals 2200-2400, 0001<br>0300, 0399 and TIME<br>DESIGNATOR (A2A) equals M | LIGHT CONDITION (A19) should equal 2, 3, 9.              |
| AA060   | LIGHT CONDITION (A19) equals 2 and TIME DESIGNATOR (A2A) equals A                    | TIME (A2) must not equal 1000-<br>1159, 1199.            |
| AA061   | LIGHT CONDITION (A19) equals<br>2 and TIME DESIGNATOR (A2A)<br>equals P              | TIME (A2) must not equal 1200 - 300, 0399.               |
| AA062   | LIGHT CONDITION (A19) equals<br>2 and TIME DESIGNATOR (A2A)<br>equals M              | TIME (A2) must not equal 1000-<br>1500, 1599.            |
| AA063 - | LIGHT CONDITION (A19) equals 4   | TIME DESIGNATOR (A2A) must not equal P.                  |
| AA064   | LIGHT CONDITION (A19) equals 5   | TIME DESIGNATOR (A2A) must not equal A.                  |
| AA065   | LIGHT CONDITION (A19) equals 1 and TIME DESIGNATOR (A2A) equals A                    | TIME (A2) must not equal 1201-0300, 0399.                |
| AA066   | LIGHT CONDITION (A19) equals<br>1 and TIME DESIGNATOR (A2A)<br>equals M              | TIME (A2) must not equal 2200-<br>2400, 0001 0300, 0399. |

|       | iF .  | THEN   |
|-------|---|--|
| AA067 | LIGHT CONDITION (A19) equals 3 and TIME DESIGNATOR (A2A) equals A | TIME (A2) should not equal 1000-<br>1159, 1199.          |
| AA068 | LIGHT CONDITION (A19) equals 3 and TIME DESIGNATOR (A2A) equals M | TIME (A2) should not equal 1000-<br>1500, 1599.          |
| AA069 | LIGHT CONDITION (A19) equals 3 and TIME DESIGNATOR (A2A) equals P | TIME (A2) should not equal 1200-0300, 0399.              |
| AA072 | LIGHT CONDITION (A19) equals 1 and TIME DESIGNATOR (A2A) equals P | TIME(A2) must not equal 1000-<br>1159, 1199.             |
| AA073 | LIGHT CONDITION (A19) equals 1 and TIME DESIGNATOR (A2A) equals A | TIME (A2) should equal 0500-1159, 1199, 9999.            |
| AA074 | LIGHT CONDITION (A19) equals 1 and TIME DESIGNATOR (A2A) equals M | TIME (A2) should equal 0500-2100, 2199, 9999.            |
| AA075 | LIGHT CONDITION (A19) equals 1 and TIME DESIGNATOR (A2A) equals P | TIME (A2) should equal 1200-0900, 0999, 9999.            |
| AA076 | LIGHT CONDITION (A19) equals 2 and TIME DESIGNATOR (A2A) equals A | TIME (A2) should equal 1200-0900, 0999, 9999.            |
| AA077 | LIGHT CONDITION (A19) equals 2 and TIME DESIGNATOR (A2A) equals P | TIME (A2) should equal 0400-1159, 1199, 9999.            |
| AA078 | LIGHT CONDITION (A19) equals 2 and TIME DESIGNATOR (A2A) equals M | TIME (A2) should equal 1600-2400, 0001-0900, 0999, 9999. |
| AA079 | LIGHT CONDITION (A19) equals 4 and TIME DESIGNATOR (A2A) equals M | TIME (A2) must not equal 1000-2400, 0001 0300, 0399.     |

|       | IF   | THEN  |
|-------|--|---|
| AA080 | LIGHT CONDITION (A19) equals 4 and TIME DESIGNATOR (A2A) equals A or M | TIME (A2) should equal 0400-0900, 0999, 9999. |
| AA081 | LIGHT CONDITION (A19) equals 5 and TIME DESIGNATOR (A2A) equals P      | TIME (A2) should equal 0400-0900, 0999, 9999. |
| AA082 | LIGHT CONDITION (A19) equals 5 and TIME DESIGNATOR (A2A) equals M      | TIME (A2) should equal 1600-2100, 2199, 9999. |
| AA089 | LIGHT CONDITION (A19) equals 6   | TIME (A2) should equal 9999.                  |
| AA093 | Reminder: Use Time (A2/A2A) to cho                                     | ose between Dawn (4) and Dusk (5).            |

### **A20** Atmospheric Condition

### **Element Values**

- 1 No Adverse Atmospheric Conditions
- 2 Rain
- 3 Sleet
- 4 Snow
- 5 Fog
- 6 Rain And Fog
- 7 Sleet And Fog
- 8 Other: Smog, Smoke, Blowing Sand/Snow/Dust, Crosswind, Hail, Etc.
- 9 Unknown

#### Remarks

Enter "8" (Other: Smog, Smoke, Blowing Sand/Snow/ Dust, Crosswind, Hail, Etc.) when precipitation, or particle dispersion has affected the driver's visual ability or the vehicle's controllability.

**Enter "9" (Unknown)** when the police report indicates more than one response for atmospheric conditions.

### **Consistency Check**

#### A20

|       | IF  | THEN  |
|-------|---|---|
| AA028 | ATMOSPHERIC CONDITION (A20) equals 2-4, 6-7   | ROADWAY SURFACE<br>CONDITION (A15) should not equal<br>1, 5, 8, or 9. |
| AA034 | MONTH (A1) equals 05 09                       | ATMOSPHERIC CONDITION (A20) should not equal 3 or 4.                  |
| AA084 | ROADWAY SURFACE<br>CONDITION (A15) equals 1   | ATMOSPHERIC CONDITION (A20) should not equal 2, 3, 4, 6, or 7.        |
| AD150 | ATMOSPHERIC CONDITION (A20) equals 1          | DRIVER'S VISION OBSCURED BY (D4) must not equal 15.                   |
| DA124 | DRIVER'S VISION OBSCURED<br>BY (D4) equals 01 | ATMOSPHERIC CONDITION (A20) should not equal 1.                       |
| DA159 | DRIVER'S VISION OBSCURED<br>BY (D4) equals 15 | ATMOSPHERIC CONDITION (A20) should equal 5, 6, 7, or 9.               |
| DA160 | DRIVER'S VISION OBSCURED<br>BY (D4) equals 15 | ATMOSPHERIC CONDITION (A20) must not equal 1.                         |

### **A21 School Bus Related**

#### **Element Values**

0 No

1 Yes

#### Remarks

This variable applies to accidents in which a school bus was directly or indirectly involved, such as an accident involving children exiting from a school bus. The school bus does not have to be involved in the accident. If it cannot be determined that a school bus was involved, enter "0" (No).

For the purpose of this variable, a school bus refers to a motor vehicle defined by the police on the PAR as such.

### **Consistency Check**

|       |   | A21   |  |
|-------|---|---|--|
|       | <b>IF</b>   | THEN  |  |
| AP024 | SCHOOL BUS RELATED (A21)<br>equals 1 and PERSON TYPE (P3)<br>equals 5               | PEDESTRIAN/BIKE ACCIDENT<br>TYPE (A24) should equal 0120. |  |
| AP027 | PEDESTRIAN/BIKE ACCIDENT<br>TYPE (A24) equals 0120 and<br>PERSON TYPE (P3) equals 5 | SCHOOL BUS RELATED (A21) must equal 1.                    |  |
| AV210 | SCHOOL BUS RELATED (A21) equals 1   | at least one SPECIAL USE (V8) should equal 02.            |  |
| AV236 | SCHOOL BUS RELATED (A21) equals 1   | at least one BODY TYPE (V5) should equal 24 or 50.        |  |
| VA002 | SPECIAL USE (V8) for any vehicle equals 02  | SCHOOL BUS RELATED (A21) must equal 1.                    |  |
| VA102 | BODY TYPE (V5) equals 24 or 50  | SCHOOL BUS RELATED (A21) should equal 1.                  |  |

A 24

### **A22** Police Jurisdiction

#### **Element Values**

Range: 001-120

#### Remarks

Enter the number of the police jurisdiction from which the PAR was originally sampled. This number is written at the top of the PAR (usually in the upper right-hand corner) and is prefaced by the character 'P'. This information is also available on the Stratification Record.

### **A23 Stratum**

#### **Element Values**

- 1 Column 1
- 2 Column 2
- 3 Column 3
- 4 Column 4

#### Remarks

Enter the number of the column in which the PAR was originally listed on the Stratification Record. This number is written at the top of the PAR (usually in the upper right-hand corner) and is prefaced by the character 'C'.

### **Consistency Check**

|       |   | A23   |
|-------|---|---|
|       | IF  | THEN  |
| AP098 | STRATUM (A23) equals 3                                      | at least one INJURY SEVERITY (P9) should equal 2, 3, or 4.      |
| AP144 | STRATUM (A23) equals 4                                      | INJURY SEVERITY (P9) should not equal 2, 3, 4, or 5.            |
| AV099 | STRATUM (A23) equals 1                                      | at least one MANNER OF LEAVING SCENE (V19) should equal 2 or 3. |
| AV100 | STRATUM (A23) equals 3 or 4 and BODY TYPE (V5) equals 01 49 | MANNER OF LEAVING SCENE (V19) should not equal 2 or 3.          |
| AV121 | STRATUM (A23) equals 1 or 3                                 | BODY TYPE (V5) should not equal 60-79.                          |
| AV145 | STRATUM (A23) equals 1                                      | at least one BODY TYPE (V5) should equal 01-49.                 |
| AV146 | STRATUM (A23) equals 2                                      | at least one BODY TYPE (V5) should equal 60-79.                 |

|       | IF  | THEN  |
|-------|---|---|
| AV230 | STRATUM (A23) equals 4 and at least one BODY TYPE (V5) equals 60-79                                 | no INJURY SEVERITY (P9) should equal 1, 2, 3, or 4. |
| AV231 | STRATUM (A23) equals 4 and no<br>BODY TYPE (V5) equals 60-79  | no INJURY SEVERITY (P9) should equal 2, 3, or 4.    |
| PV188 | (any) INJURY SEVERITY (P9) equals 1,2,3,4, or 5 and (any) BODY TYPE (V5) equals 60-79               | STRATUM (A23) should equal 2.                       |
| PV233 | INJURY SEVERITY (P9) equals 1<br>and at least one BODY TYPE (V5)<br>EQUALS 60-79                    | STRATUM (A23) should not equal 4.                   |
| VP143 | no MANNER OF LEAVING<br>SCENE (V19) equals 2 and no<br>INJURY SEVERITY (P9) equals 2,<br>3, 4, or 5 | STRATUM (A23) should equal 4.                       |

# A24 Pedestrian/Bike Accident Type

#### **Element Value**

0000 Not Applicable

9999 First Non-Motorist Involved Is Unknown Person Type

#### **Manual Accident Typing For Pedestrian Accidents**

Range (increments of ten): 0110-0150, 0210-0230, 0310-0330, 0410-0430, 0510, 0520, 0531, 0532, 0539, 0610, 0620, 0710-0760, 0790, 0810, 0821, 0822, 0829, 0830, 0840, 0890, 0910, 0920

#### **Manual Accident Typing For Bicyclist Accidents**

Range: 0001-0036, 0039-0041, 0048, 0049, 0055, 0097, 0098, 0099

#### Remarks

This variable is used to categorize accidents involving pedestrians, pedalcyclists, and a subset of occupants of a nonmotor vehicle transport devices. The appropriate category code is determined using two classification schemes: Accident Typing For Pedestrian Accidents and Accident Typing For Bicyclist Accidents. The use of each classification scheme is dependent upon the non-motorist person type first involved in the accident

#### **Accident Typing For Pedestrian Accidents**

To be used when: the first non-motorist involved in the accident is a pedestrian [Person Type (P3) = 5] or the first non-motorist involved is coded Person Type = 4 (Occupant Of a Nonmotor Vehicle Transport Device) and the nonmotorist conveyance is a pair of skates, scooter, skateboard or wheelchair.



Read each question to determine the type of pedestrian accident.

- 1. Did the motorist strike pedestrian going to/from or crossing near:
  - bus or bus stop?
  - ice cream vendor?
  - rural residential mailbox?
  - Or was pedestrian exiting/entering a stopped or parked vehicle?



- 2. Was the striking vehicle:
  - driverless?
  - backing?
  - in pursuit, being pursued, or an emergency vehicle?



- 3. Was pedestrian struck by motorist while going to/from or near/next to a:
  - disabled vehicle?
  - active police/emergency vehicle?



- 4. Was pedestrian struck while:
  - · working in roadway?
  - playing in roadway prior to motorist's appearance?
  - on a play vehicle?



- **5.** Was pedestrian struck by motorist while:
  - · hitchhiking?
  - crossing a limited access expressway?
  - walking or running along a road?



- 6. Did motorist strike pedestrian:
  - on/near curb or roadway edge?
  - on sidewalk or other nonroadway location?



7. Did accident occur at or within 50 feet of an intersection?



8. Did the accident occur midblock (more than 50 feet from an intersection)?



9. Is the information either not consistent with any of those described above, or inadequate?



#### **Special Code**

Whenever the non-motorist is in a wheelchair the first character of the four character field is coded "1". In all other cases this character is coded "0".

Use the Accident Typing for Pedestrian Accidents manual to determine the correct code for the accident when wheelchair is coded.

#### Category 1

In Category 1, the motorist struck pedestrian going to/from or crossing near a bus or bus stop; ice cream vendor; rural residential mailbox; exiting/entering a stopped or parked vehicle. Use the following codes for the corresponding situations.

# Pedestrian was struck while crossing in front of a commercial bus standing at a marked bus stop.

• Includes only buses that stop periodically at marked or unmarked bus stops. Does not include church, YMCA, or other buses not stopping at marked stops.

| ТҮРЕ                      | SUBTYPE | CODE | CODE IF PEDESTRIAN IN WHEEL CHAIR |
|---------------------------|---------|------|-----------------------------------|
| Commercial<br>Bus-Related | None    | 0110 | 1110                              |

#### Pedestrian was struck going to/from a school bus or school bus stop.

- This type includes the accident in which the pedestrian is struck by a school bus.
- The bus does not have to be present if the pedestrian was noted to have been crossing to, from, or was at a school bus stop.
- Includes the pedestrian being at or near a school bus or school bus stop.

| ТҮРЕ               | SUBTYPE | CODE | CODE IF PEDESTRIAN IN WHEEL CHAIR |
|--------------------|---------|------|-----------------------------------|
| School Bus-Related | None    | 0120 | 1120                              |

### Pedestrian was struck while going to/from an ice cream vendor and striking vehicle was on same street as vendor.

• A truck (not a pushcart or trailer) vending from curb or roadside.

| ТҮРЕ                      | SUBTYPE | CODE | CODE IF PEDESTRIAN IN WHEEL CHAIR |
|---------------------------|---------|------|-----------------------------------|
| Vendor/Ice Cream<br>Truck | None    | 0130 | 1130                              |

### Pedestrian was struck while going to/from a private residence mailbox/newspaper box.

- Includes the pedestrian being at the box.
- "Private residence mailbox" does not include a US mail box in which letters are dropped to be mailed.

| ТҮРЕ             | SUBTYPE | CODE | CODE IF PEDESTRIAN IN WHEEL CHAIR |
|------------------|---------|------|-----------------------------------|
| Mail Box-Related | None    | 0140 | 1140                              |

# Pedestrian was in the process of exiting/entering parked or stopped vehicle, and was struck in traffic lane next to stopped/parked vehicle.

- A pedestrian is only in the process of exiting/entering while in contact with vehicle or within 2-3 steps of the door.
- Pedestrian was struck in the roadway (e.g., not on sidewalk, in parking lot, etc.).
- The pedestrian was struck when entering or exiting the parked or stopped vehicle on the side
  of the vehicle that was adjacent to traffic.

| ТҮРЕ             | SUBTYPE | CODE | CODE IF PEDESTRIAN IN WHEEL CHAIR |
|------------------|---------|------|-----------------------------------|
| Exiting/Entering | None    | 0150 | 1150                              |

#### Category 2

In Category 2, the striking vehicle was: driverless; backing; in pursuit; being pursued; or an emergency vehicle. Use the following codes for the corresponding situations.

### The pedestrian was struck by a vehicle that was moving without a driver at the controls or was set into motion by the actions of a child.

Does not include vehicles set in motion as a result of an auto-auto collision.

| ТҮРЕ               | SUBTYPE | CODE | CODE IF PEDESTRIAN IN WHEEL CHAIR |
|--------------------|---------|------|-----------------------------------|
| Driverless Vehicle | None    | 0210 | 1210                              |

#### The pedestrian was struck by a vehicle that was backing up.

| ТҮРЕ            | SUBTYPE | CODE | CODE IF PEDESTRIAN IN WHEEL CHAIR |
|-----------------|---------|------|-----------------------------------|
| Backing Vehicle | None    | 0220 | 1220                              |

### The pedestrian was struck by a vehicle on an emergency/police mission, or by a vehicle being pursued.

- Police or fire department car, ambulance or aid car, or fire truck (but not a tow truck) that is responding to an emergency, official business, or a disabled vehicle.
- Does not include a pedestrian who is pursuing or being pursued.

| ТҮРЕ        | SUBTYPE | CODE | CODE IF PEDESTRIAN IN WHEEL CHAIR |
|-------------|---------|------|-----------------------------------|
| Hot Pursuit | None    | 0230 | 1230                              |

#### Category 3

In Category 3, the pedestrian was struck by motorist while walking to/from or while near/next to: a disabled vehicle, an active police/emergency vehicle. Use the following codes for the corresponding situations.

### The pedestrian was struck walking to or from a disabled vehicle (e.g., to get help, gas, etc.)

• The pedestrian was not in immediate proximity of the disabled vehicle.

| ТҮРЕ                                   | SUBTYPE | CODE | CODE IF PEDESTRIAN IN WHEEL CHAIR |
|--|---------|------|-----------------------------------|
| Walking To or From<br>Disabled Vehicle | None    | 0310 | 1310                              |

# The pedestrian was struck while working on or standing near a disabled vehicle in or along the roadway. (No emergency vehicle present.)

- In this type, "pedestrian" does not include on-duty police or emergency personnel, but does include tow truck operators.
- A disabled vehicle is any vehicle stopped with a problem preventing normal driving. It doesn't necessarily have to be "broken down" but could have been in an accident.

| ТҮРЕ                        | SUBTYPE | CODE | CODE IF PEDESTRIAN IN WHEEL CHAIR |
|-----------------------------|---------|------|-----------------------------------|
| Disabled<br>Vehicle-Related | None    | 0320 | 1320                              |

#### The pedestrian was struck while near an active emergency or police vehicle.

• Police or fire department car, ambulance or aid car, or fire truck (but not a tow truck) that is responding to an emergency, official business, or a disabled vehicle.

| ТҮРЕ                                 | SUBTYPE | CODE | CODE IF PEDESTRIAN IN WHEEL CHAIR |
|--------------------------------------|---------|------|-----------------------------------|
| Emergency/ Police<br>Vehicle-Related | None    | 0330 | 1330                              |

#### Category 4

In Category 4, the pedestrian was struck while working or playing in roadway or on a play vehicle. Use the following codes for the corresponding situations.

The pedestrian (e.g., police/emergency personnel, flagman, traffic guard, or member of a roadway/construction maintenance crew) was struck while working on, in, over, or under the roadway.

- Person was present in the roadway because of the requirements of his or her job. Includes garbage collectors, construction crews, etc., but not people who are in the street voluntarily (e.g., a civilian directing traffic at the scene of an accident).
- That part of the road including through lanes, turn lanes, and parking lanes, but not including the shoulder.
- Alleys and driveways which are controlled by a traffic signal, are considered roadways.

| ТҮРЕ               | SUBTYPE | CODE | CODE IF PEDESTRIAN IN WHEEL CHAIR |
|--------------------|---------|------|-----------------------------------|
| Working on Roadway | None    | 0410 | 1410                              |

### The pedestrian was struck while riding a play vehicle (e.g., wagon, sled, skateboard; NOT bicycle, "Big Wheel" type vehicle, or tricycle).

- A play toy which may be ridden but is not a normal mode of transportation (such as wagons, sleds, scooters, roller-skates, and skateboards). Skateboards, while used by some people as a form of transportation, are to be considered play vehicles. Tricycles, "Big Wheel" type vehicles, and bicycles are not included as play vehicles for the purposes of pedestrian accident typing.
- The pedestrian does not need to be in the road on the play vehicle for this type to apply, e.g., accidents occurring on the sidewalk or driveway may be included.

| ТҮРЕ                 | SUBTYPE | CODE | CODE IF PEDESTRIAN IN WHEEL CHAIR |
|----------------------|---------|------|-----------------------------------|
| Play Vehicle-Related | None    | 0420 | 1420                              |

### The pedestrian was struck while playing on foot in roadway. Pedestrian was playing in roadway prior to vehicle's appearance.

| TYPE               | SUBTYPE | CODE | CODE IF PEDESTRIAN IN |
|--------------------|---------|------|-----------------------|
|                    |         |      | WHEEL CHAIR           |
| Playing in Roadway | None    | 0430 | 1430                  |

#### Category 5

In Category 5, the pedestrian was struck by motorist while: hitchhiking; crossing limited access expressway; walking or running along a road without sidewalks. Use the following codes for the corresponding situations.

#### The pedestrian was struck while hitchhiking.

| ТҮРЕ        | SUBTYPE | CODE | CODE IF PEDESTRIAN IN WHEEL CHAIR |
|-------------|---------|------|-----------------------------------|
| Hitchhiking | None    | 0510 | 1510                              |

#### Pedestrian was struck while attempting to cross a limited access expressway.

 A major thoroughfare without intersecting cross streets, having specific entrance and exit ramps. Includes superhighways, interstates, freeways, turnpikes, and parkways. Entrance and exit ramps are considered part of an expressway.

| ТҮРЕ                | SUBTYPE | CODE | CODE IF PEDESTRIAN IN WHEEL CHAIR |
|---------------------|---------|------|-----------------------------------|
| Expressway Crossing | None    | 0520 | 1520                              |

#### Pedestrian was walking or running along a road in the same direction as traffic.

• The pedestrian was not on the sidewalk but could have been walking on the shoulder or in the roadway.

| ТУРЕ               | SUBTYPE      | CODE | CODE IF PEDESTRIAN IN WHEEL CHAIR |
|--------------------|--------------|------|-----------------------------------|
| Walking Along Road | With Traffic | 0531 | 1531                              |

#### Pedestrian was walking or running along a road facing traffic (i.e., against traffic).

The pedestrian was not on the sidewalk but could have been walking on the shoulder or in the roadway.

| ТУРЕ               | SUBTYPE         | CODE | CODE IF PEDESTRIAN IN WHEEL CHAIR |
|--------------------|-----------------|------|-----------------------------------|
| Walking Along Road | Against Traffic | 0532 | 1532                              |

# Pedestrian WAS walking or running along a road-direction with respect to traffic not specified.

 The pedestrian was not on the sidewalk but could have been walking on the shoulder or in the roadway.

| ТҮРЕ               | SUBTYPE       | CODE | CODE IF PEDESTRIAN IN WHEEL CHAIR |
|--------------------|---------------|------|-----------------------------------|
| Walking Along Road | Can't Specify | 0539 | 1539                              |

#### Category 6

In Category 6, the motorist struck pedestrian: on/near curb or roadway edge; on sidewalk; or on other nonroadway location. Use the following codes for the corresponding situations.

### Pedestrian was struck while WAITING to cross roadway, standing at or near curb.

| ТҮРЕ  | SUBTYPE | CODE | CODE IF PEDESTRIAN IN WHEEL CHAIR |
|---|---------|------|-----------------------------------|
| Pedestrian Waiting to<br>Cross At/Near Curb | None    | 0610 | 1610                              |

### Pedestrian was struck when not in/near a roadway (e.g., in parking lot, driveway, private road, gas station, alley, sidewalk, yard, garage, ball field).

• Includes standing off the roadway, but near the edge of the roadway, as well as on the curb. For instance, standing on the shoulder or on the curb waiting to cross the roadway.

| ТҮРЕ                         | SUBTYPE      | CODE | CODE IF PEDESTRIAN IN WHEEL CHAIR |
|------------------------------|--------------|------|-----------------------------------|
| Pedestrian Not In<br>Roadway | With Traffic | 0620 | 1620                              |

#### Category 7

In Category 7, the accident occurred at or within 50 feet of an intersection. Use the following codes for the corresponding situations.

### Pedestrian entered roadway in front of standing/stopped traffic, and was struck by vehicle heading in same direction as stopped traffic.

- A stopped vehicle has the engine running and a driver at the controls; it is not an empty parked vehicle.
- This type covers an accident in which the pedestrian has entered the roadway in front of a vehicle that has stopped to allow the pedestrian to cross.

  The pedestrian crosses in front of the stopped vehicle, and then is struck by another vehicle traveling in the same direction as the stopped vehicle. The second vehicle was not aware that the pedestrian was crossing in front of the stopped vehicle.
- This type does not cover a pedestrian entering the roadway in front of stalled traffic or a disabled vehicle (see type 320).
- If the traffic light changed while the pedestrian was crossing, continue down to the "Trapped" type (code 740).

| ТҮРЕ                                 | SUBTYPE | CODE | CODE IF PEDESTRIAN IN WHEEL CHAIR |
|--------------------------------------|---------|------|-----------------------------------|
| Multiple Threat - At<br>Intersection | None    | 0710 | 1710                              |

Pedestrian and vehicle collided while the vehicle was in the process of turning/merging, was preparing to turn/merge, or had just completed a turning/merging maneuver.

| ТҮРЕ               | SUBTYPE | CODE | CODE IF PEDESTRIAN IN WHEEL CHAIR |
|--------------------|---------|------|-----------------------------------|
| Vehicle Turn/Merge | None    | 0720 | 1720                              |

## The motorist's view of the pedestrian was blocked until an instant before impact and/or the pedestrian was running.

- The driver's view of the pedestrian was blocked by some obstruction until immediately before impact. The obstruction was documented in some part of the report as having impaired the driver's vision.
- Assume walking if the only indication of the pedestrian's speed is "crossing" or "staggering."
   Take the narrative literally (i.e., assume that the pedestrian is running if the report has a statement such as "The pedestrian ran in front of me.")

| ТҮРЕ              | SUBTYPE | CODE | CODE IF PEDESTRIAN IN WHEEL CHAIR |
|-------------------|---------|------|-----------------------------------|
| Intersection Dash | None    | 0730 | 1730                              |

# At a signalized intersection, pedestrian in process of crossing was struck when light changed and traffic started moving.

| ТҮРЕ    | SUBTYPE | CODE | CODE IF PEDESTRIAN IN WHEEL CHAIR |
|---------|---------|------|-----------------------------------|
| Trapped | None    | 0740 | 1740                              |

#### Pedestrian walked into (i.e., struck) the vehicle.

Pedestrian was walking, not running, and struck the vehicle.

| ТҮРЕ  | SUBTYPE | CODE | CODE IF PEDESTRIAN IN WHEEL CHAIR |
|---|---------|------|-----------------------------------|
| Pedestrian Walks Into<br>Vehicle - At<br>Intersection | None    | 0750 | 1750                              |

Pedestrian was struck by a driver who was proceeding straight ahead and the report indicated that the driver committed one or more of the following violations: careless driving, failed to yield right-of-way, signal/sign violation, speeding/too fast for conditions, DWI/DUI.

- Report Indicated
- Must be reported by policeman
- in narrative, or
- in boxes, or
- in charges, citations, or arrests.
- Careless Driving
- Is the same as "without due regard."

| ТҮРЕ                               | SUBTYPE | CODE | CODE IF PEDESTRIAN IN WHEEL CHAIR |
|------------------------------------|---------|------|-----------------------------------|
| Intersection - Driver<br>Violation | None    | 0760 | 1760                              |

### Accident occurred at an intersection but is not covered by any of the above or there is insufficient information to code any of the above.

• The roadway up to and including 50 feet from the corner. Alleys and driveways are only considered intersections when they are controlled by a <u>traffic signal</u>. Assume intersection if no information is given other than an intersection drawn in the report.

| ТҮРЕ                 | SUBTYPE | CODE | CODE IF PEDESTRIAN IN |
|----------------------|---------|------|-----------------------|
|                      |         |      | WHEEL CHAIR           |
| Intersection - Other | None    | 0790 | 1790                  |

#### Category 8

In Category 8, the accident occurred midblock (i.e., more than 50 feet from an intersection). Use the following codes for the corresponding situations.

Pedestrian entered roadway in front of standing/stopped traffic, and was struck by vehicle heading in same direction as standing traffic; driver's vision was blocked by standing traffic.

- A stopped vehicle has the engine running and driver at the controls; it is not an empty parked vehicle.
- This type covers an accident in which the pedestrian has entered the roadway in front of a vehicle that has stopped to allow the pedestrian to cross. The pedestrian crosses in front of the stopped vehicle, and then is struck by another vehicle traveling in the same direction as the stopped vehicle. The second vehicle was not aware that the pedestrian was crossing in front of the stopped vehicle.
- This type does not cover a pedestrian entering the roadway in front of stalled traffic or a disabled vehicle.
- If the traffic light changed while the pedestrian was crossing, see previous code "Trapped" type.

| ТҮРЕ                                 | SUBTYPE | CODE | CODE IF PEDESTRIAN IN WHEEL CHAIR |
|--------------------------------------|---------|------|-----------------------------------|
| Multiple Threat - At<br>Intersection | None    | 0810 | 1810                              |

Pedestrian was struck before crossing half of the roadway (in first half of roadway) and the motorist's view of the pedestrian WAS blocked until an instant before impact.

- Pedestrian was struck before reaching the center-line of the roadway.
- A dart-out (0821, 0822, or 0829) can only occur if there is some documented visual obstruction. If there is any indication in the report that a physical object, such as a bus, stopped or parked vehicle, or building, was present (for example: "She came out from

- between two parked cars."), assume this object was an obstruction, unless the driver specifically mentions that the pedestrian had been visible heading towards the roadway before the accident.
- Indications of parked vehicles in diagram qualify as obstructions even if not specifically mentioned in the narrative.
- Do not assume that, for instance, rain or darkness always constitutes an obstruction. They
  would only be an obstruction if the driver or officer mentioned that the driver's view was
  impaired because of these factors.

| ТҮРЕ     | SUBTYPE    | CODE | CODE IF PEDESTRIAN IN WHEEL CHAIR |
|----------|------------|------|-----------------------------------|
| Dart-Out | First Half | 0821 | 1821                              |

# Pedestrian was struck after crossing over half of the roadway (in second half of roadway) and the motorist's view of the pedestrian was blocked until an instant before impact.

- The pedestrian had crossed on-half of the roadway and was struck at the centerline or after having crossed the centerline.
- A dart-out can only occur if there is some documented visual obstruction. If there is any indication in the report that a physical object, such as a bus, stopped or parked vehicle, or building, was present (for example: "She came out from between two parked cars."), assume this object was an obstruction, unless the driver specifically mentions that the pedestrian had been visible heading towards the roadway before the accident.
- Indications of parked vehicles in diagram qualify as obstructions even if not specifically mentioned in the narrative.
- Do not assume that, for instance, rain or darkness always constitutes an obstruction. They
  would only be an obstruction if the driver or officer mentioned that the driver's view was
  impaired because of these factors.

| ТҮРЕ     | SUBTYPE     | CODE | CODE IF PEDESTRIAN IN WHEEL CHAIR |
|----------|-------------|------|-----------------------------------|
| Dart-Out | Second Half | 0822 | 1822                              |

# Pedestrian was struck after entering roadway and motorist's view of the pedestrian was blocked until an instant before impact (first or second half of roadway not specified).

- A dart-out can only occur if there is some documented visual obstruction. If there is any indication in the report that a physical object, such as a bus, stopped or parked vehicle, or building, was present (for example: "She came out from between two parked cars."), assume this object was an obstruction, unless the driver specifically mentions that the pedestrian had been visible heading towards the roadway before the accident.
- Indications of parked vehicles in diagram qualify as obstructions even if not specifically mentioned in the narrative.
- Do not assume that, for instance, rain or darkness always constitutes an obstruction. They
  would only be an obstruction if the driver or officer mentioned that the driver's view was
  impaired because of these factors.

| ТҮРЕ     | SUBTYPE       | CODE | CODE IF PEDESTRIAN IN WHEEL CHAIR |
|----------|---------------|------|-----------------------------------|
| Dart-Out | Can't Specify | 0829 | 1829                              |

### Pedestrian was running and the motorist's view of the pedestrian was not obstructed.

- Assume walking if the only indication of the ped's speed is "crossing" or "staggering." Take the narrative literally (i.e., assume that the ped is running if the report has a statement such as "The ped ran in front of me").
- No obstructions indicated in the report, or driver indicates that there was no obstruction.

| ТҮРЕ          | SUBTYPE | CODE | CODE IF PEDESTRIAN IN |
|---------------|---------|------|-----------------------|
|               |         |      | WHEEL CHAIR           |
| Midblock Dash | None    | 0830 | 1830                  |

#### Pedestrian walked into (i.e., struck) the vehicle.

• Pedestrian was walking, not running, and struck the vehicle.

| ТҮРЕ  | SUBTYPE | CODE | CODE IF PEDESTRIAN IN WHEEL CHAIR |
|---|---------|------|-----------------------------------|
| Pedestrian Walks Into<br>Vehicle - Midblock | None    | 0840 | 1840                              |

Accident occurred midblock but is not covered by any of the above or insufficient information is given to code any of the above.

| ТҮРЕ             | SUBTYPE | CODE | CODE IF PEDESTRIAN IN |
|------------------|---------|------|-----------------------|
|                  |         |      | WHEEL CHAIR           |
| Midblock - Other | None    | 0890 | 1890                  |

#### Category 9

In Category 9, the accident is other type or has inadequate information. Use the following codes for the corresponding situations.

The accident situation is not covered by any of the types listed in categories 1-8.

| ТҮРЕ          | SUBTYPE | CODE | CODE IF PEDESTRIAN IN |
|---------------|---------|------|-----------------------|
|               |         |      | WHEEL CHAIR           |
| Other - Weird | None    | 0910 | 1910                  |

#### Insufficient information was available to specify the accident type.

| ТҮРЕ                      | SUBTYPE | CODE | CODE IF PEDESTRIAN IN WHEEL CHAIR |
|---------------------------|---------|------|-----------------------------------|
| Inadequate<br>Information | None    | 0920 | 1920                              |

#### **Accident Typing For Bicyclist Accidents**

To be used when: The first non-motorist involved in the accident is a Pedalcyclist [Person Type (P3) = 6].



Code each report as follows:

- 1. Read the police accident report carefully and completely:
  - First, read the narrative. In case of conflicting stories give first priority to officer's conclusion, then the witness statement, and finally the bicyclist or driver statement.
  - Next, review the information in the specific information categories (i.e., the "check off" boxes), such as time, day, violations, weather, bicyclist's age, driver's age and roadway information.
  - Finally, examine the diagram. Remember that diagrams are seldom drawn to scale. Although a diagram might appear to show an accident occurred at an intersection, for example, check the report form for the actual measurement of the point of impact from the nearest intersection.
- 2. Read each of the Specific Circumstances accident types in order.
- 3. If none of the Special Circumstances apply, determine whether the initial approach paths of the motorist and bicyclist were <u>parallel</u> or <u>crossing</u> and flip to that page.
- 4. Review each heading in order, and stop at the first one that applies.
- 5. Within that heading, review each accident type description in order and stop at the <u>first</u> one that applies. Record the accident code number beside the report number on the data form.
- 6. If no accident type description applies, continue with the next heading and repeat steps 4 and 5.
- 7. If you reach the Insufficient Information heading without finding a type that applies, enter that code (0098 or 0099). Before using an Insufficient Information code, review the report to assure that you have not missed any information that would lead you to select another accident type.

As you code, refer to the diagram accompanying each accident type and the definitions page for additional information. Remember that the diagrams are examples only, and <u>not</u> represent all possible situations to which the type can be applied.

If more than one bicyclist is involved in an accident, the first bicyclist struck defines the accident. Consider only the circumstances surrounding the collision with the first bicyclist in determining the type.

Read each accident description. If none apply, see Initial Approach Paths.

#### 1. The accident was weird because:

- The motorist or cyclist intentionally caused the accident.
- The officer indicated no accident actually occurred.
- The accident did not involve a cyclist.
- The cyclist was struck by falling cargo.

| CODE | TYPE  |
|------|-------|
| 0036 | Weird |

2. The cyclist was riding a child's vehicle, such as a "Big Wheel" type tricycle, other tricycle, or a bicycle with training wheels. (But not an adult tricycle.)

| CODE | TYPE    |
|------|---------|
| 0040 | Vehicle |

3. The accident involved a motor vehicle which was backing.

| CODE | TYPE    |
|------|---------|
| 0011 | Backing |

#### 4. The accident occurred in:

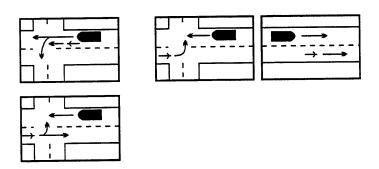
- a parking lot or open area.
- another non-roadway location, such as a gas station, alley, lot, etc.

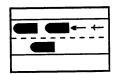
| CODE | TYPE        |
|------|-------------|
| 0029 | Non-Roadway |

#### **Initial Approach Paths**

To specify the initial approach paths (i.e., before any turns which caused the accident or turns to avoid it), read each question.

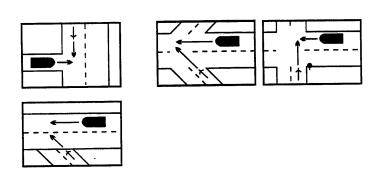
#### **Parallel**

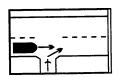




Were the cycle and motor vehicle approaching each other on parallel paths, heading either in the same direction or in opposing directions? If yes, see Parallel Paths on page 86.

#### Crossing





Were the cycle and motor vehicle on intersecting paths? If yes, see Crossing Paths on page 92.

#### Unknown

If there is no way of knowing whether the vehicles' initial approach paths were parallel or crossing, use code 0097.

#### Parallel Paths

Choose the description that best fits the accident.

If the motorist turned or merged into the path of the cyclist, go to Parallel Path 1 listed below.

If the cyclist turned or merged into the path of the motorist, go to Parallel Path 2 listed below.

If the operator was on the wrong side of the street, go to Parallel Path 3 listed below.

If the motorist was overtaking the cyclist, go to Parallel Path 4 listed below.

If the cyclist was overtaking a motor vehicle, go to Parallel Path 5 listed below.

If the operator lost control and inadvertently swerved into the path of the other vehicle because of:

- mechanical failure, such as brakes, steering, tires, or other vehicle problems
- road conditions, such as ice, potholes, mud, sand, or other surface conditions.
- prior collision with moving or stationary object(s).
- operator impairment due to drugs or alcohol.
- operator error due to oversteering or improper braking.

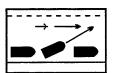
go to Parallel Path 6 listed below.

If there is no way of knowing which of the above is true, see Parallel Path 7 listed below.

#### Parallel Path 1

The motorist turned or merged into the path of the cyclist.

The motorist was exiting or entering on-street parking.



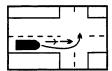
CODE

**TYPE** 

0035

Drive out - on street parking

Left, going in the same direction as cyclist.

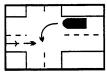


CODE

0022 Motorist left turn in front of cyclist

**TYPE** 

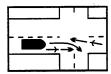
Left, facing each other as approached.



CODE TYPE

0023 Motorist left turn facing cyclist

Right, going in either the same direction or opposite directions.



CODE TYPE

0024 Motorist right turn in front of cyclist

#### Parallel Path 2

The cyclist turned or merged into the path of the motorist.

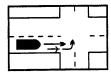
Onto the street from a residential driveway or alley. Cyclist coming from sidewalk.



CODE TYPE

0003 Ride-out from sidewalk.

Left, going the same direction as the motorist.



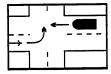
CODE

**TYPE** 

0018

Cyclist left turn, in front of traffic.

Left, facing each other as approached.



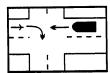
CODE

**TYPE** 

0019

Cyclist left turn, facing traffic.

Right, and the cyclist was riding on the wrong side of the street.



CODE

**TYPE** 

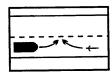
0021

Cyclist right turn, from wrong side of street.

#### Parallel Path 3

The operator was on the wrong side of the street.

Either operator was going the wrong way, the approach was head-on, and the evasive actions were counteractive.



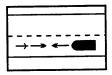
CODE

TYPE

0030

Head-on, counteractive evasive actions.

The motorist was going the wrong way.



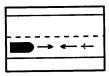
CODE

**TYPE** 

0028

Wrong way motorist

The cyclist was going the wrong way.



CODE

**TYPE** 

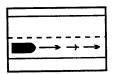
0026

Wrong way cyclist

#### Parallel Path 4

The motorist was overtaking the cyclist.

The motorist failed to detect the cyclist.



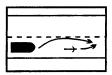
CODE

**TYPE** 

0013

Motorist overtakes undetected cyclist

The evasive actions were counteractive.



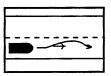
CODE

**TYPE** 

0015

Motorist overtaking, counteractive evasive actions

The motorist misjudged the space, length, or width required to pass the cyclist.



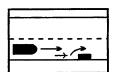
CODE

**TYPE** 

0016

Motorist overtaking, misjudges passing space

The cyclist's path was obstructed. Cyclist struck obstruction or overtaking motorist.



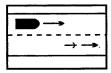
CODE

**TYPE** 

0017

Motorist overtaking cyclist, path obstructed

Other situations involving a motorist overtaking a cyclist.



CODE

**TYPE** 

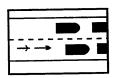
0039

Motorist overtaking

#### Parallel Path 5

#### The cyclist was overtaking a motor vehicle.

Cyclist struck a slow or stopped vehicle in a traffic lane.



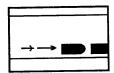
CODE

**TYPE** 

0027

Cyclist overtaking

Cyclist struck a vehicle in parking lane.



CODE

**TYPE** 

0041

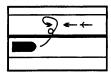
Cyclist strikes parked vehicle

#### Parallel Path 6

The operator lost control and inadvertently swerved into the path of the other vehicle because of any of the following reasons:

- mechanical failure, such as brakes, steering, tires, or other vehicle problems
- road conditions, such as ice, potholes, mud, sand, or other surface conditions
- prior collision with moving or stationary objects
- operator impairment due to drugs or alcohol
- operator error due to oversteering or improper braking

#### Motorist loss of control



CODE

**TYPE** 

0014

Motorist lost control

Cyclist loss of control



CODE

**TYPE** 

0020

Cyclist lost control

#### Parallel Path 7

**Insufficient Information** 

CODE

TYPE

0098

Parallel Paths Unknown

#### **Crossing Paths**

Choose the description that best fits the accident.

The list did not clear intersection before light turned green for cross traffic. See Crossing Path 1 listed below.

The motorist failed to yield to the cyclist. See Crossing Path 2 listed below.

The cyclist failed to yield to the motorist, midblock. See Crossing Path 3 listed below.

The cyclist failed to yield to the motorist at an intersection. See Crossing Path 4 listed below.

The motorist was turning. See Crossing Path 5 listed below.

The cyclist was turning. See Crossing Path 6 listed below.

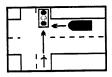
The accident occurred at an intersection. See Crossing Path 7 listed below.

If there is no way of knowing which of the "Crossing Paths" is true, see Crossing Path 8 listed below.

#### Crossing Path 1

### The cyclist did not clear intersection before light turned green for cross traffic.

The motorist's view of the cyclist was not obstructed.



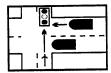
CODE

**TYPE** 

0006

Trapped

The motorist's view of the cyclist was obstructed by standing traffic.



CODE

**TYPE** 

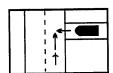
0007

Multiple Threat

#### Crossing Path 2

#### The motorist failed to yield to the cyclist.

At a driveway, alley or other midblock location.



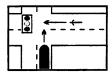
CODE

**TYPE** 

0008

Drive out, driveway/alley

At a controlled intersection. Motorist ran a sign or signal.



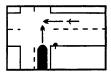
CODE

**TYPE** 

0012

Drive through

At an intersection controlled by a stop sign or flashing light, motorist obeyed the sign but failed to yield to the cyclist.



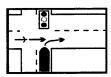
CODE

**TYPE** 

0009

Drive out, stop sign

At an intersection controlled by a signal, motorist obeyed the signal but failed to yield to the cyclist.



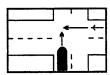
CODE

**TYPE** 

0010

Right on red

At an intersection, situation not covered above.



CODE

**TYPE** 

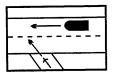
0048

Drive out, intersection

#### Crossing Path 3

### The cyclist failed to yield to the motorist, midblock.

At a residential driveway or alley.



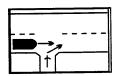
CODE

**TYPE** 

0001

Ride out, residential driveway

At a commercial driveway.



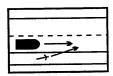
CODE

**TYPE** 

0002

Ride out, commercial driveway

At a shoulder or curb -- midblock location. (Cyclist not using driveway.)



CODE

**TYPE** 

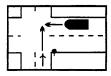
0004

Ride out, midblock

#### Crossing Path 4

#### The cyclist failed to yield to the motorist at an intersection.

At an intersection controlled by a stop sign or flashing red signal.



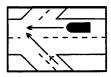
CODE

**TYPE** 

0005

Ride out, stop sign

At an intersection, situation not covered above.



CODE

**TYPE** 

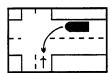
0049

Ride out, intersection

#### Crossing Path 5

#### The motorist was turning.

Left, cut the corner.



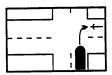
CODE

**TYPE** 

0033

Motorist cuts corner

Right, swung out too wide.



CODE

**TYPE** 

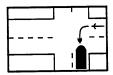
0034

Motorist swings wide

#### **Crossing Path 6**

The cyclist was turning.

Left, cut the corner.



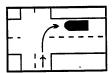
CODE

**TYPE** 

0031

Cyclist cuts corner

Right, swung out too wide.



CODE

**TYPE** 

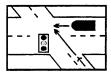
0032

Cyclist swings wide

#### Crossing Path 7

#### The accident occurred at an intersection.

Intersection was controlled by stop signs or signals.



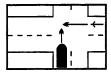
CODE

**TYPE** 

0055

Controlled intersection, other

Intersection had no signs or signals.



CODE

**TYPE** 

0025

Uncontrolled intersection, other

#### **Crossing Path 8**

#### **Insufficient Information**

CODE

**TYPE** 

0099

Intersecting Paths, Unknown

## **Consistency Check**

|       |  | A24  |
|-------|--|--|
|       | IF   | THEN   |
| AA037 | FIRST HARMFUL EVENT (A6) equals 21, or 22  | PEDESTRIAN/BIKE ACCIDENT TYPE (A24) must not equal 0000.         |
| AA038 | PEDESTRIAN/BIKE ACCIDENT<br>TYPE (A24) equals 0810, 0821,<br>0822, 0829, 0830, 0840, or 0890                               | RELATION TO JUNCTION (A9) must not equal 01 or 11.               |
| AA039 | PEDESTRIAN/BIKE ACCIDENT<br>TYPE (A24) equals 0410, 0420, or<br>0430, and FIRST HARMFUL<br>EVENT (A6) equals 21, 22, or 27 | RELATION TO ROADWAY (A10) must equal 1.                          |
| AA040 | PEDESTRIAN/BIKE ACCIDENT<br>TYPE (A24) equals 0740   | TRAFFIC CONTROL DEVICE (A16) must not equal 00.                  |
| AA041 | PEDESTRIAN/BIKE ACCIDENT<br>TYPE (A24) equals 0740   | TRAFFIC CONTROL DEVICE (A16) should equal 01, 04, 08, 09, or 99. |
| AA042 | FIRST HARMFUL EVENT (A6) equals 22   | PEDESTRIAN/BIKE ACCIDENT TYPE (A24) must equal 0001 - 0099.      |
| AA043 | PEDESTRIAN/BIKE ACCIDENT<br>TYPE (A24) equals 0001, 0002, or<br>0008   | RELATION TO JUNCTION (A9) must equal 03 or 13.                   |
| AA044 | PEDESTRIAN/BIKE ACCIDENT<br>TYPE (A24) equals 0005, 0006,<br>0007, 0010, 0012, 0025, 0048,<br>0049, 0055                   | RELATION TO JUNCTION (A9) must equal 01 or 11.                   |
| AA045 | PEDESTRIAN/BIKE ACCIDENT<br>TYPE (A24) equals 0005, 0006,<br>0007, 0009, 0010, 0012, or 0055                               | TRAFFIC CONTROL DEVICE (A16) must not equal 00.                  |
| AA046 | PEDESTRIAN/BIKE ACCIDENT<br>TYPE (A24) equals 0006, 0007,<br>0010  | TRAFFIC CONTROL DEVICE (A16) must equal 01, 04, 08, or 09.       |
| AA047 | PEDESTRIAN/BIKE ACCIDENT<br>TYPE (A24) equals 0005   | TRAFFIC CONTROL DEVICE (A16) must equal 04 or 21.                |

|       |   | , ·   |
|-------|---|---|
| AA048 | IF PEDESTRIAN/BIKE ACCIDENT TYPE (A24) equals 0012, or 0055   | THEN TRAFFIC CONTROL DEVICE (A16) must equal 01, 04, 08, 09, 21, 22, 28, or 29. |
| AA049 | PEDESTRIAN/BIKE ACCIDENT<br>TYPE (A24) equals 0025  | TRAFFIC CONTROL DEVICE (A16) should equal 00.                                   |
| AA050 | PEDESTRIAN/BIKE ACCIDENT<br>TYPE (A24) equals 0003, 0018,<br>0019, 0021, 0022, 0023, 0024               | RELATION TO JUNCTION (A9) should not equal 00 or 10.                            |
| AA051 | PEDESTRIAN/BIKE ACCIDENT<br>TYPE (A24) equals 0610 or 0620<br>and FIRST HARMFUL EVENT<br>(A6) equals 21 | RELATION TO ROADWAY (A10) must not equal 1.                                     |
| AA070 | NUMBER OF NON MOTORISTS (A4) equals 00  | PEDESTRIAN/BIKE ACCIDENT TYPE (A24) must equal 0000.                            |
| AA090 | PEDESTRIAN/BIKE ACCIDENT<br>TYPE (A24) equals 0009  | RELATION TO JUNCTION (A9) must not equal 00.                                    |
| AA091 | PEDESTRIAN/BIKE ACCIDENT<br>TYPE (A24) equals 0005, 0009,<br>0010, 0012, 0025, 0049, or 0055            | RELATION TO JUNCTION (A9) should equal 01, 02, 11, or 12.                       |
| AD026 | PEDESTRIAN/BIKE ACCIDENT<br>TYPE (A24) equals 0210  | at least one DRIVER PRESENCE (D1) must equal 0.                                 |
| AD034 | PEDESTRIAN/BIKE ACCIDENT<br>TYPE (A24) equals 0007  | at least one DRIVER'S VISION<br>OBSCURED BY (D4) must equal 07<br>or 11.        |
| AD043 | PEDESTRIAN/BIKE ACCIDENT<br>TYPE (A24) equals 0760  | at least one VIOLATIONS<br>CHARGED (D2) should not equal<br>00.                 |
| AD088 | PEDESTRIAN/BIKE ACCIDENT<br>TYPE (A24) equals 0821, 0822,<br>0829                                       | at least one DRIVER'S VISION OBSCURED BY (D4) must not equal 00.                |
| AD154 | PEDESTRIAN/BIKE ACCIDENT<br>TYPE (A24) equals 0006  | at least one DRIVER'S VISION OBSCURED BY (D4) must equal 00.                    |
| AP021 | PEDESTRIAN/BIKE ACCIDENT<br>TYPE (A24) equals 0000  | PERSON TYPE (P3) must not equal 5, 6, or 8.                                     |

|       | IF  | THEN  |
|-------|---|---|
| AP023 | RELATION TO JUNCTION (A9) equals 01 or 11 and at least one PERSON TYPE (P3) equals 5                              | PEDESTRIAN/BIKE ACCIDENT<br>TYPE (A24) must not equal 0810,<br>0821, 0822, 0829, 0830, 0840 or<br>0890.   |
| AP024 | SCHOOL BUS RELATED (A21) equals 1 and PERSON TYPE (P3) equals 5   | PEDESTRIAN/BIKE ACCIDENT TYPE (A24) should equal 0120.  |
| AP027 | PEDESTRIAN/BIKE ACCIDENT<br>TYPE (A24) equals 0120 and<br>PERSON TYPE (P3) equals 5                               | SCHOOL BUS RELATED (A21) must equal 1.  |
| AP039 | RELATION TO JUNCTION (A9) equals 01, 02, 11 or 12, and at least one PERSON TYPE (P3) equals 5                     | PEDESTRIAN/BIKE ACCIDENT<br>TYPE (A24) should equal 0710,<br>0720, 0730, 0740, 0750, 0760, 0790.  |
| AP040 | RELATION TO ROADWAY (A10) is not equal to 1 and at least one PERSON TYPE (P3) equals 5                            | PEDESTRIAN/BIKE ACCIDENT<br>TYPE (A24) should equal 0610,<br>0620, 0910, or 0920.   |
| AP054 | TRAFFIC CONTROL DEVICE (A16) equals 01, 04, 08, 09, 21, 22, 28, or 29, and at least one PERSON TYPE (P3) equals 6 | PEDESTRIAN/BIKE ACCIDENT<br>TYPE (A24) should equal 0005,<br>0006, 0007, 0009, 0010, 0012, 0018,<br>0019, 0021 0024, 0048, 0049, 0054<br>or 0055. |
| AP061 | PEDESTRIAN/BIKE ACCIDENT<br>TYPE (A24) equals 0520 and<br>PERSON TYPE (P3) equals 5                               | NON MOTORIST'S ACTION (P19) must equal 21 or 22.  |
| AP062 | PEDESTRIAN/BIKE ACCIDENT<br>TYPE (A24) equals 0001, 0002,<br>0004, 0005, or 0049                                  | NON MOTORIST'S ACTION (P19) must equal 01-07.   |
| AP063 | PEDESTRIAN/BIKE ACCIDENT<br>TYPE (A24) equals 0830  | NON MOTORIST'S ACTION (P19) should equal 21.  |
| AP077 | PEDESTRIAN/BIKE ACCIDENT<br>TYPE (A24) equals 0420  | at least one PERSON TYPE (P3) must equal 4.   |
| AP129 | PEDESTRIAN/BIKE ACCIDENT<br>TYPE (A24) equals 0750 or 0840  | NON MOTORIST'S ACTION (P19) must not equal 21.  |
| AP155 | PEDESTRIAN/BIKE ACCIDENT<br>TYPE (A24) equals 9999  | at least one PERSON TYPE (P3) must equal 8.   |

|       | IF  | THEN  |
|-------|---|---|
| AP156 | PEDESTRIAN/BIKE ACCIDENT<br>TYPE (A24) equals 0410 or 0430  | at least one NON MOTORIST'S ACTION (P19) must equal 29.   |
| AP157 | PEDESTRIAN/BIKE ACCIDENT<br>TYPE (A24) equals 0531  | at least one NON MOTORIST'S ACTION (P19) must equal 25 or 27.                                     |
| AP158 | PEDESTRIAN/BIKE ACCIDENT<br>TYPE (A24) equals 0532  | at least one NON MOTORIST'S ACTION (P19) must equal 25 or 28.                                     |
| AP235 | First character of PED/BIKE<br>ACCIDENT TYPE (A24) equals 1   | at least one PERSON'S PHYSICAL<br>IMPAIRMENT (P18) should equal<br>04.                            |
| AV022 | FIRST HARMFUL EVENT (A6) equals 21 and NUMBER OF NON MOTORISTS (A4) equals 01 and PEDESTRIAN/BIKE ACCIDENT TYPE (A24) equals 0220 | at least one MOVEMENT PRIOR TO<br>CRITICAL EVENT (V21) must<br>equal 07, 08, 13, or 98.           |
| AV030 | PEDESTRIAN/BIKE ACCIDENT<br>TYPE (A24) equals 0011  | at least one MOVEMENT PRIOR TO CRITICAL EVENT (V21) must equal 13 or 98.                          |
| AV031 | PEDESTRIAN/BIKE ACCIDENT<br>TYPE (A24) equals 0035  | at least one MOVEMENT PRIOR TO<br>CRITICAL EVENT (V21) must<br>equal 07 or 08.                    |
| AV032 | PEDESTRIAN/BIKE ACCIDENT<br>TYPE (A24) equals 0022, 0023, or<br>0033  | at least one MOVEMENT PRIOR TO<br>CRITICAL EVENT (V21) must<br>equal 11.                          |
| AV033 | PEDESTRIAN/BIKE ACCIDENT<br>TYPE (A24) equals 0010, 0024, or<br>0034  | at least one MOVEMENT PRIOR TO CRITICAL EVENT (V21) must equal 10.                                |
| AV041 | PEDESTRIAN/BIKE ACCIDENT<br>TYPE (A24) equals 0230  | at least one EMERGENCY USE (V9) should equal 1.   |
| AV042 | PEDESTRIAN/BIKE ACCIDENT<br>TYPE (A24) equals 0720  | at least one MOVEMENT PRIOR TO<br>CRITICAL EVENT (V21) should<br>equal 10, 11, 12, 17, 98, or 99. |
| AV055 | PEDESTRIAN/BIKE ACCIDENT<br>TYPE (A24) equals 0003, 0018,<br>0019, or 0021  | at least one MOVEMENT PRIOR TO CRITICAL EVENT (V21) should equal 01.                              |

|       | IF  | THEN  |
|-------|---|---|
| AV089 | PEDESTRIAN/BIKE ACCIDENT<br>TYPE (A24) equals 0840  | at least one VEHICLE ROLE (V22) must equal 2.   |
| PA049 | PEDESTRIAN/BIKE ACCIDENT<br>TYPE (A24) must equal 0110-<br>0150, 0210 0230, 0310 0330, 0410-<br>0430, 0510 0539, 0610, 0620, 0710-<br>0790, 0810 0890, 0910, or 0920. | at least one PERSON TYPE (P3) equals 5  |
| PA051 | PERSON TYPE (P3) equals 5 and<br>NON MOTORIST LOCATION<br>(P13) equals 08, 18, or 98  | PEDESTRIAN/BIKE ACCIDENT TYPE (A24) should equal 0610 or 0620.  |
| PA053 | NON MOTORIST LOCATION (P13) equals 01, 02, 08, or 09 and PERSON TYPE (P3) equals 5  | PEDESTRIAN/BIKE ACCIDENT<br>TYPE (A24) should equal 0710,<br>0720, 0730, 0740, 0750, 0760, or<br>0790.  |
| PA058 | PEDESTRIAN/BIKE ACCIDENT<br>TYPE (A24) must equal 0001-0041,<br>0048, 0049, 0055, 0097, 0098, or<br>0099.   | at least one PERSON TYPE (P3) equals 6  |
| PA064 | NON MOTORIST'S ACTION (P19) equals 29   | PEDESTRIAN/BIKE ACCIDENT TYPE (A24) must not equal 0610 or 0620.  |
| PA065 | NON MOTORIST'S ACTION (P19) equals 07   | PEDESTRIAN/BIKE ACCIDENT<br>TYPE (A24) must equal 0001, 0002,<br>0003, 0004, 0005, 0018, 0019, 0021,<br>0026, 0040, 0049, 0097, 0098, or<br>0099. |
| PA083 | PERSON'S PHYSICAL<br>IMPAIRMENT (P18) equals 04 and<br>PERSON TYPE (P3) equals 4  | the first character of PEDESTRIAN/BIKE ACCIDENT TYPE (A24) must equal 1.  |
| PA096 | PERSON TYPE (P3) equals 5 or 6  | PEDESTRIAN/BIKE ACCIDENT TYPE (A24) must not equal 0000.  |
| PA168 | NON MOTORIST'S ACTION (P19) equals 27   | PEDESTRIAN/BIKE ACCIDENT TYPE (A24) should equal 0531.  |
| PA169 | NON MOTORIST'S ACTION (P19) equals 28   | PEDESTRIAN/BIKE ACCIDENT TYPE (A24) should equal 0532.  |

|       |   | A24  |
|-------|---|--|
|       | IF NON MOTORIST'S ACTION (P19) equals 25  | THEN PEDESTRIAN/BIKE ACCIDENT TYPE (A24) should equal 0531, 0532, or 0539.   |
| VA218 | MOVEMENT PRIOR TO CRITICAL EVENT (V21) equals 00 and at least one PERSON TYPE (P3) equals 5, and, for this person, NON-MOTORIST STRIKING VEHICLE # (P22) equals the vehicle # for which V21 equals 00 | PEDESTRIAN/BIKE ACCIDENT<br>TYPE (A24) must equal 0210.  |
| VP045 | at least one # OF OCCUPANTS<br>(V10) equals 00 and at least one<br>PERSON TYPE (P3) equals 5  | PEDESTRIAN/BIKE ACCIDENT TYPE (A24) should equal 0210 or 0320.   |
| VP046 | at least one MOVEMENT PRIOR<br>TO CRITICAL EVENT (V21)<br>equals 13 and at least one PERSON<br>TYPE (P3) equals 5   | PEDESTRIAN/BIKE ACCIDENT TYPE (A24) should equal 0220.   |
| VP047 | at least one MOVEMENT PRIOR<br>TO CRITICAL EVENT (V21)<br>equals 10-12, or 17 and at least one<br>PERSON TYPE (P3) equals 5   | PEDESTRIAN/BIKE ACCIDENT<br>TYPE (A24) should equal 0720.  |
| VP056 | MOVEMENT PRIOR TO<br>CRITICAL EVENT (V21) equals<br>11 and at least one PERSON TYPE<br>(P3) equals 6  | PEDESTRIAN/BIKE ACCIDENT<br>TYPE (A24) should equal 0005,<br>0009, 0010, 0012, 0022, 0023, 0033,<br>0048, or 0049. |
| VP057 | MOVEMENT PRIOR TO<br>CRITICAL EVENT (V21) equals<br>13 and at least one PERSON TYPE<br>(P3) equals 6  | PEDESTRIAN/BIKE ACCIDENT<br>TYPE (A24) should equal 0011.  |
| VP136 | MOVEMENT PRIOR TO<br>CRITICAL EVENT (V21) equals<br>10 and at least one PERSON TYPE<br>(P3) equals 6  | PEDESTRIAN/BIKE ACCIDENT<br>TYPE (A24) should equal 0005,<br>0009, 0010, 0012, 0024, or 0034,<br>0048, or 0049.    |

## ► A25 Work Zone

#### **Element Values**

0

No

1 Yes

#### Remarks

Enter "0" (No) when the first harmful event does not occur in a work or construction area.

Enter "1" (Yes) when the PAR indicates that the first harmful event occurred in a work zone or construction area. Work zones can often be identified by the presence of a warning sign. A specific block for work zones may be available on the PAR. The narrative or diagram may also indicate the presence of a work zone.

## **Consistency Check**

| A25 |
|-----|
|-----|

|       | IF                                     | THEN   |
|-------|--|--|
| AA097 | WORK ZONE (A25) equals 1               | TRAFFIC CONTROL DEVICE (A16) should equal 01-42, 51 or 98. |
| AA097 | WORK ZONE (A25) equals 1               | TRAFFIC CONTROL DEVICE (A16) should equal 01-42 or 51.     |
| AA098 | TRAFFIC CONTROL DEVICE (A16) equals 42 | WORK ZONE (A25) should equal 1.                            |

# ► A26 NHS Roadway Type

| Elemen   | t Values                          |
|----------|-----------------------------------|
| 00       | Not NHS Roadway                   |
| Urban    |                                   |
| 01       | EIS                               |
| 02       | Congressional High Priority Route |
| 03       | STRAHNET Route                    |
| 04       | STRAHNET Major Connector          |
| 05       | Other NHS Route                   |
| 09       | Unknown Urban Route               |
| Rural    |                                   |
| 11       | EIS                               |
| 12       | Congressional High Priority Route |
| 13       | STRAHNET Route                    |
| 14       | STRAHNET Major Connector          |
| 15       | Other NHS Route                   |
| 19       | Unknown Rural Route               |
| Urban Or | Rural                             |
| 21       | EIS                               |
| 22       | Congressional High Priority Route |
| 23       | STRAHNET Route                    |
| 24       | STRAHNET Major Connector          |
| 25       | Other NHS Route                   |
| 98       | Unknown if Urban or Rural         |
| 99       | Unknown if NHS Route              |

#### Remarks

The Federal Highway Administration (FHWA) created a new roadway classification scheme called the National Highway System (NHS). This system was developed in compliance with the requirements of ISTEA (Intermodal Surface Transportation Efficiency Act). All GES PSU state and area maps were reviewed to identify NHS roadways. These roadways were compiled for each PSU, and it was determined whether each NHS roadway was urban or rural. A table was created for each PSU. Use this information to determine the appropriate code for this variable.

Use the PAR to identify the name of the roadway on which the accident occurred. Next, determine the NHS type and Urban/Rural designation by locating the roadway on the PSU table.

In some PSUs, an NHS roadway will cross between an urban and a rural area. These roadways are coded under "Urban Or Rural".

#### **Consistency Check**

|       |   | A26  |
|-------|---|--|
|       | IF  | THEN   |
| AA099 | NHS ROADWAY TYPE (A26) equals 01, 11, or 21 | INTERSTATE HIGHWAY (A8) should equal 1.                |
| AA100 | RELATION TO JUNCTION (A9) equals 01 09      | NHS ROADWAY TYPE (A26) should not equal 01, 11, or 21. |
| AA100 | RELATION TO JUNCTION (A9) equals 01-09      | NHS ROADWAY TYPE (A26) should not equal 01, 11, or 21. |
| AA101 | INTERSTATE HIGHWAY (A8) equal 1.            | NHS ROADWAY TYPE (A26) should equal 01, 11, or 21.     |

## **V01 Vehicle Number**

#### **Element Values**

Range 01 through 30 (system generated number)

#### Remarks

Vehicles should be entered into the system in the order NASS GES vehicles are listed on the PAR. If there are any vehicles not listed on the PAR, then use the next consecutive number.

When one motor vehicle is towing another, the vehicle number or numbers assigned depends on the accident circumstances and the type of linkage between the vehicles. A fixed linkage is defined as one which has the property of keeping the towed unit separated from the power unit by a distance which is essentially constant. Included within this definition are cradle linkages where the towed unit has two or more wheels off the ground. A nonfixed linkage (such as a rope or a chain) requires the towed unit to be manually controlled.

If the linkage between the units is fixed, assign a vehicle number to the power (i.e., towing) unit only and consider the towed unit as cargo throughout the entire accident sequence, regardless of subsequent events/impacts sustained by the towed unit. In other words, a vehicle towed by a fixed linkage: (1) is never considered as an in-transport vehicle, (2) will not require a form, and (3) will be considered as cargo associated with the power unit.

If the linkage between the units is nonfixed, each vehicle is considered to be in-transport, and a vehicle number is assigned only to the vehicle(s) involved in the accident sequence.

Do not include any struck motor vehicles **not in-transport** (e.g., a vehicle parked off the roadway). A vehicle form is not completed for these vehicles. Any occupants they contain, including a person who was intent on driving the vehicle, are handled using the person form.

## V02 Hit and Run

#### **Element Values**

- 0 No, Did Not Leave Scene
- 1 Yes, Driver Or Car & Driver Left Scene
- 9 Unknown

#### Remarks

A hit-and-run may occur when a motor vehicle in-transport has contact with: (a) another motor vehicle in-transport, (b) a motor vehicle not in-transport, (c) a motor vehicle not in-transport which contains a nonmotorist, (d) a pedestrian, (e) pedalcyclist, (f) another nonmotorist, or (g) an object. Hit-and-run is only considered when a motor vehicle in-transport, or its driver, departs from the scene; therefore, fleeing pedestrians and motor vehicles not in-transport are excluded.

It does not matter whether the hit-and-run vehicle was striking or struck. The hit-and-run vehicle(s) is (are) the one(s) that departed prior to investigation by the police, or that vehicle which is abandoned at the scene when its occupant(s) fled from the area (see exceptions below). If the police report indicates that the vehicle was involved in a collision which was investigated, but there is little or no information on that vehicle because of its departure prior to police arrival on-scene, then "hit-and-run" is indicated.

Exceptions to this "departed prior to investigation by the police" rule exist. One exception occurs if an occupant, or occupants, of a vehicle are taken, or go, directly from the scene to a medical treatment facility or physician. If doubt exists concerning the departure for treatment, assume hit-and-run. A second exception involves a driver who leaves the scene but furnishes name, address, vehicle make, model, and model year such that it is recorded on the PAR, and the PAR does not indicate hit-and-run. Enter "0" (No, Did Not Leave Scene) in this instance independent of the truthfulness of the information provided. A third exception involves vehicles which set an object in motion such that (1) the object is contacted, before it stabilizes, by another in-transport motor vehicle, and (2) the vehicle which set the object in motion leaves the scene without providing the pertinent information (compare with exception two above), and (3) the PAR does not indicate hit-and-run. In this instance enter "0" (No, Did Not Leave Scene) is to be encoded; however, if the PAR had indicated hit-and-run, then enter "1" (Yes, Driver Or Car & Driver).

Enter "1" (Yes, Driver or Car & Driver Left Scene) when it has been determined that a hit-and-run (as defined in paragraphs one through three of this variable) has occurred.

When the presence of a hit-and-run vehicle is indicated (V02 equals "1"), include vehicle forms for each such vehicle. If the vehicle was known or assumed to have been in-transport at the time of the accident, at least one person form should be completed. If the PAR indicates that a vehicle contained "x" number of occupants or nonmotorists (departed scene but was not in-transport at time of impact) at the time of its involvement, then submit the appropriate number of person forms. Although most of the variables on the forms will have element values which are unknown, the forms are necessary to document the presence of the vehicle(s) and its person(s).

## **Consistency Check**

|       |  | V02   |
|-------|--|---|
| AV013 | IF FIRST HARMFUL EVENT (A6) equals 01-10, 31-50, 58, or 59           | THEN HIT-AND-RUN (V2) should not equal 1.   |
| VP208 | HIT AND RUN (V2) equals 1 and MANNER OF LEAVING SCENE (V19) equals 1 | EJECTION (P6) must equal 0.   |
| VP234 | HIT AND RUN (V2) equals 1  | all TAKEN TO HOSPITAL OR<br>TREATMENT FACLITY (P10) for this<br>vehicle should equal 0. |
| VV073 | VEHICLE CONTRIBUTING FACTORS (V12) equals 50                         | HIT-AND-RUN (V2) must equal 1.  |
| VV083 | HIT-AND-RUN (V2) equals 1  | VEHICLE CONTRIBUTING FACTORS (V12) must not equal 99.                                   |
| VV197 | VIOLATIONS CHARGED (D2) equals 50                                    | HIT-AND-RUN (V2) must equal 1.  |
| VV198 | DRIVER PRESENCE (D1) equals 2  | HIT-AND-RUN (V2) must equal 1.  |
| VV199 | DRIVER'S VISION OBSCURED<br>BY (D4) equals 50                        | HIT-AND-RUN (V2) must equal 1.  |
| VV200 | DRIVER MANEUVERED TO<br>AVOID (D6) equals 50                         | HIT-AND-RUN (V2) must equal 1.  |
| VV201 | DRIVER DISTRACTED BY (D7) equals 50                                  | HIT-AND-RUN (V2) must equal 1.  |
| VV202 | HIT-AND-RUN (V2) equals 1  | DRIVER PRESENCE (D1) must equal 2.  |
| VV203 | HIT-AND-RUN (V2) equals 1  | VIOLATIONS CHARGED (D2) must not equal 99.  |
| VV204 | HIT-AND-RUN (V2) equals 1  | DRIVER'S VISION OBSCURED BY (D4) must not equal 99.                                     |
| VV205 | HIT-AND-RUN (V2) equals 1  | DRIVER MANEUVERED TO AVOID (D6) must not equal 99.                                      |
| VV206 | HIT-AND-RUN (V2) equals 1  | DRIVER DISTRACTED BY (D7) must not equal 99.  |

## **V03 Vehicle Make**

## **Element Values**

| V04 |                               | page  | V04 |                      | page  |
|-----|-------------------------------|-------|-----|----------------------|-------|
| 01  | American Motors               | (114) | 30  | Volkswagen           | (125) |
| 02  | Jeep                          |       | 31  | Alfa Romeo           | (126) |
|     | (includes Kaiser- Jeep)       | (114) | 32  | Audi                 | (126) |
| 03  | AM General                    | (115) | 33  | Austin/Austin Healey | (127) |
| 06  | Chrysler                      | (115) | 34  | BMW                  | (127) |
| 07  | Dodge                         | (116) | 35  | Nissan/Datsun        | (128) |
| 08  | Imperial                      | (117) | 36  | Fiat                 | (128) |
| 09  | Plymouth                      | (117) | 37  | Honda                | (129) |
| 10  | Eagle                         | (118) | 38  | Isuzu                | (130) |
| 12  | Ford                          | (118) | 39  | Jaguar               | (130) |
| 13  | Lincoln                       | (119) | 40  | Lancia               | (131) |
| 14  | Mercury                       | (120) | 41  | Mazda                | (131) |
| 18  | Buick                         | (120) | 42  | Mercedes Benz        | (132) |
| 19  | Cadillac                      | (121) | 43  | MG                   | (132) |
| 20  | Chevrolet                     | (121) | 44  | Peugeot              | (133) |
| 21  | Oldsmobile                    | (123) | 45  | Porsche              | (133) |
| 22  | Pontiac                       | (123) | 46  | Renault              | (133) |
| 23  | GMC .                         | (124) | 47  | Saab                 | (134) |
| 24  | Saturn                        | (124) | 48  | Subaru               | (134) |
| 25  | Grumman                       | (125) | 49  | Toyota               | (134) |
| 29  | Other Domestic: V04=          | (125) | 50  | Triumph              | (135) |
|     | 001 - Studebaker/Avanti       |       | 51  | Volvo                | (136) |
|     | 002 - Checker                 |       | 52  | Mitsubishi           | (136) |
|     | 398-Other make (i.e., DeSoto, |       | 53  | Suzuki               | (137) |
|     | Excaliber, Stutz, Hudson,     |       | 54  | Acura                | (138) |
|     | Packard)                      |       | 55  | Hyundai              | (138) |
|     | 399-Unknown make              |       |     |                      |       |

| V04 |  | page    | V04       |                         |                                   | page  |
|-----|--|---------|-----------|-------------------------|-----------------------------------|-------|
| 56  | Merkur   | (139)   | 61        | Sterling                |                                   | (140) |
| 57  | Yugo   | (139)   | 62        | Rover                   |                                   | (140) |
| 58  | Infiniti   | (139)   | 63        | Kia                     |                                   | (140) |
| 59  | Lexus  | (139)   | 69        | Other fore              | ign                               | (140) |
| 60  | Daihatsu   | (140)   |           |                         |                                   |       |
|     |  | d Cycle | /ATC/ATV  | (70-79)                 |                                   |       |
| 70  | BSA  |         | 78        | All make                | moped                             |       |
| 71  | Ducati   |         | 79        | Other mo                | tored cycle                       |       |
| 72  | Harley-Davidson                                    |         | Also see: | [34] - BM               | ſW                                |       |
| 73  | Kawasaki   |         |           | [37] - Ho               | nda                               |       |
| 74  | Moto-Guzzi   |         |           | [44] - Pet              | igeot                             |       |
| 75  | Norton   |         |           | [50] - Tri              | umph                              |       |
| 76  | Yamaha   |         |           | [53] - Suz              | zuki                              |       |
|     | Truc   | ks and  | Buses (80 | )-98)                   |                                   |       |
| 80  | Brockway   |         |           | 902 - Nec               | Plan (bus)                        |       |
| 81  | Diamond Reo/Reo                                    |         |           | 950 - Bus               | based motorhome                   |       |
| 82  | Freightliner/White                                 |         |           | 988 - Oth               | er bus                            |       |
| 83  | FWD  |         |           | 989 - Unk               | nown bus                          |       |
| 84  | International Harvester/Navistar                   | (142)   |           | 998 - Oth<br>vehicle, g | er vehicle (i.e., farm<br>o-cart) |       |
| 85  | Kenworth   |         | Also See: |                         |                                   |       |
| 86  | Mack   |         |           | [03]                    | AM General                        |       |
| 87  | Peterbilt  |         |           | [07]                    | Dodge                             |       |
| 88  | Iveco/Magirus                                      |         |           | [12]                    | Ford                              |       |
| 98  | Other: V04=  |         |           | [20]                    | Chevrolet                         |       |
|     | 801 - Autocar                                      |         |           | [23]                    | GMC                               |       |
|     | 802 - Auto-Union-DKW                               |         |           | [25]                    | Grumman                           |       |
|     | 803 - Divco  |         |           | [35]                    | Nissan/Datsun                     |       |
|     | 804 - Western Star                                 |         |           | [36]                    | Fiat                              |       |
|     | 805 - Oshkosh                                      |         |           | [38]                    | Isuzu                             |       |
|     | 806 - Hino   |         |           | [42]                    | Mercedes Benz                     |       |
|     | 807 - Scania                                       |         |           | [51]                    | Volvo                             |       |
|     | 850 - Truck based motorhome                        |         |           | [52]                    | Mitsubishi                        |       |
|     | 898 - Other truck (e.g., Ward<br>LaFrance, Marmon) |         |           |                         |                                   |       |
|     |  | Unkno   | wn (99)   |                         |                                   |       |
| 99  | Unknown  |         | -         |                         |                                   |       |

#### Remarks

Note that for both Make (V3) and Model (V4) the use of the terms "other" and "unknown" have very specific meanings. "Other" refers to a Make (V3) or Model (V4) which is known but is not explicitly listed. "Unknown" refers to the situation where no specific Make (V3) or Model (V4) is known. Selection of the proper "other" or "unknown" code can only be made with consideration of the vehicle Body Type (V5).

For example, if a medium/heavy truck or bus make is known and is not listed, it is coded Make (V3) "98" and the appropriate model code is used. Coding Make (V3) "98" and Model (V4) "999" is not valid. If the make is unknown but the body type is known as a "school bus", for instance, it is coded Make (V3) "99" and Model (V4) "989".

Code "99" (Unknown) is used for a "hit-and-run" vehicle unless reliable evidence indicates the vehicle's make.

## **Consistency Check**

| PV171 | IF AIR BAG AVAILABILITY/ FUNCTION (P21) equals 1 or 2 and BODY TYPE (V5) equals 20          | <b>THEN</b> VEHICLE MAKE (V3) should equal 06, 07, 09, 12, 14, 20, 21, 22, 35, 41, or 49. |
|-------|---|---|
| PV194 | AIR BAG AVAILABILITY/<br>FUNCTION (P21) equals 1 or 2<br>and BODY TYPE (V5) equals<br>14-19 | VEHICLE MAKE (V3) should equal 02 or 12.  |
| PV195 | AIR BAG AVAILABILITY/<br>FUNCTION (P21) equals 1 or 2<br>and BODY TYPE (V5) equals 21       | VEHICLE MAKE (V3) should equal 09, 12, or 20.   |
| PV202 | AIR BAG AVAILABILITY/<br>FUNCTION (P21) equals 1 or 2<br>and BODY TYPE (V5) equals 31       | VEHICLE MAKE (V3) should equal 07, 12, 20, or 49.   |

**V03** 

## **V04 Vehicle Model**

## **Element Values**

## "01" AMERICAN MOTORS

| CODE | MODEL              | INCLUDES   | YEAR  |
|------|--------------------|--|-------|
| 001  | Rambler/American   | Rogue, Scrambler, 220, 440,                                      | all   |
| 002  | Rebel/Matador      | Barcelona Classic Brougham, 550, 660, 770, Matador (-78), Marlin | ali   |
| 003  | Ambassador         | Brougham, DPL, SST, DL,<br>Limited, 880, 990                     | ali   |
| 004  | Pacer              | Limited, DL  | 75-80 |
| 005  | AMX                | (2 seater only)  | 68-70 |
| 006  | Javelin            | SST, AMX (71-74)   | all   |
| 007  | Hornet/Concord     | Sportabout, Limited, DL, SC-360,<br>SST, AMX (75-78)             | all   |
| 800  | Spirit/Gremlin     | Limited, DL, Custom, X, GT<br>(83-on), AMX (79-on)               | all   |
| 009  | Eagle              | Concord based  | 80-87 |
| 010  | Eagle SX-4         | Spirit Gremlin based   | 81-84 |
| 398  | Other automobile   |  | -     |
| 399  | Unknown automobile |  | -     |
| 998  | Other vehicle      |  | •     |
| 999  | Unknown vehicle    |  | -     |

Note: Alliance, Encore, Premier-See Renault - Code "46"

## "02" JEEP (Includes KAISER-JEEP)

| CODE | MODEL                | INCLUDES   | YEAR  |
|------|----------------------|--|-------|
| 401  | CJ-2/CJ-3/CJ-4       | Military   | -66   |
| 402  | CJ-5/CJ-6/CJ-7/ CJ-8 | Scrambler, Golden Eagle,<br>Renegade, Laredo, Wrangler | 67-on |
| 403  | YJ-series            | Wrangler   | 86-on |
| 404  | Cherokee (84-on)     | Limited, Laredo, Pioneer,<br>Briarwood, Grand          | 84-on |
| 421  | Cherokee (-83)       | Wide Track, Chief, Commando,<br>Jeepster               | all   |
| 431  | Grand Wagoneer       | Custom, Brougham Limited, Wagoneer                     | 71-91 |
| 481  | Pickup               | J-10, J-20, Honcho                                     | all   |
| 482  | Comanche             | Chief  | 86-92 |
| 498  | Other light truck    |  | -     |

| 499 | Unknown light truck | - |
|-----|---------------------|---|
| 998 | Other vehicle       | - |
| 999 | Unknown vehicle     | - |

#### "03" AM GENERAL

| CODE | MODEL                            | INCLUDES                  | YEAR  |  |
|------|----------------------------------|---------------------------|-------|--|
| 401  | Dispatcher                       | Post Office (Jeep)        | all   |  |
| 421  | Hummer                           |                           | 93-on |  |
| 466  | Dispatcher                       | DJ-series-Post Office Van | all   |  |
| 498  | Other light truck                |                           | -     |  |
| 499  | Unknown light truck              |                           | -     |  |
| 884  | Medium/Heavy truck               | Military off-road         | -     |  |
| 898  | Other medium-heavy truck         |                           | -     |  |
| 899  | Unknown medium/heavy truck -     |                           |       |  |
| 950  | Bus based Motorhome -            |                           |       |  |
| 983  | Bus flat front (rear engine) Tra | ansit                     | •     |  |
| 988  | Other bus                        |                           | -     |  |
| 989  | Unknown bus                      |                           | •     |  |
| 998  | Other vehicle                    |                           | -     |  |
| 999  | Unknown vehicle                  | •                         | -     |  |

## "06" CHRYSLER

| CODE | MODEL   | INCLUDES  | YEAR           |
|------|---|---|----------------|
| 009  | Cordoba   | Crown, 300, LS  | 75-83          |
| 010  | New Yorker/Newport/<br>Fifth Avenue/Imperial            | Custom, Royal, Brougham, Town<br>and Country, 300 (-71) (excludes<br>all FWD) | all            |
| 014  | New Yorker/E Class/<br>Imperial (90-93)/Fifth<br>Avenue | FWD vehicles, Turbo   | 83-on          |
| 015  | Laser   | Turbo, XE, XT   | 84-86          |
| 016  | LeBaron   | Medallion, Salon(RWD), Landau,<br>LX, FWD except GTS or GTC<br>Sport Coupe    | 77-on          |
| 017  | LeBaron GTS/GTC   | GTS-Turbo<br>GTC-Sport Coupe  | 85-on<br>87-on |
| 031  | TC (Maserati Sport)                                     | Turbo Convertible   | 88-91          |
| 035  | Conquest  | TSi, Turbo  | 87-89          |
| 041  | Concorde  |   | 93 <b>-</b> on |
| 042  | LHS   | New Yorker (94-on)  | 94-on          |
| 043  | Sebring   |   | 95-on          |
| 044  | Cirrus  |   | 95 <b>-</b> on |
| 398  | Other automobile  |   | •              |
| 399  | Unknown automobile                                      |   | -              |
| 441  | Town and Country  | Minivan   | 90-on          |
| 498  | Other light truck                                       |   | •              |
| 499  | Unknown light truck                                     |   | •              |
| 998  | Other vehicle   |   | -              |
| 999  | Unknown vehicle   |   | -              |
|      |   |   |                |

#### "07" DODGE

| CODE | MODEL                           | INCLUDES   | YEAR           |
|------|---------------------------------|--|----------------|
| 001  | Dart                            | Custom, Swinger, Sport, GT, Demon, Special, Special Edition,                                 | 62-76          |
| 002  | Coronet/Charger(-78)/<br>Magnum | 170,270,340,360 Brougham, Custom, Superbee, Crestwood, Deluxe, XE, R/T, SE, 440, 500, Police | -79            |
| 003  | Polara/Monaco<br>Royal Monaco   | Custom, Special, Crestwood,<br>Brougham, Police, Taxi  | - 78           |
| 004  | Viper                           | RT/10  | 92-on          |
| 005  | Challenger                      | R/T, T/A, Rallye   | 70-74          |
| 006  | Aspen                           | Custom, Special Edition, Police, R/T, Sport  | 76-80          |
| 007  | Diplomat                        | Medallion, Salon, S  | 77-89          |
| 008  | Omni/Charger (83 on)            | 024, DeTomaso Miser, GLH,<br>GLHS, Shelby, Charger 2.2,<br>America, Expo                     | 78-90          |
| 009  | Mirada                          |  | 80-83          |
| 010  | St. Regis                       | Police, Taxi   | 79-81          |
| 011  | Aries (K)                       | Custom, SE, LE   | 81-89          |
| 012  | 400                             | LS   | 82-83          |
| 013  | Rampage<br>(car based pickup)   | 2.2, GT, Sport   | 82-84          |
| 014  | 600                             | ES, Turbo  | 83-88          |
| 015  | Daytona                         | Turbo Z, Shelby Z Pacifica, C/S<br>Competition, IROC R/T                                     | 84-94          |
| 016  | Lancer                          | Pacifica, Turbo, ES, Shelby  | 85-89          |
| 017  | Shadow                          | ES, Turbo  | 87-on          |
| 018  | Dynasty                         |  | 88-on          |
| )19  | Spirit                          | ES, Shelby, RT   | 89-94          |
| 020  | Neon                            | Expresso   | 94-on          |
| )33  | Challenger                      | all imported   | 78-83          |
| 034  | Colt (excludes Vista)           | RS, Turbo, Custom, GTS, DL, E, Premier, Deluxe, Carousel, GT                                 | 74-94          |
| )35  | Conquest                        | Turbo  | 84-86          |
| )39  | Stealth                         |  | 91 <b>-</b> on |
| )40  | Monaco                          |  | 90-92          |
| 041  | Intrepid                        |  | 93-on          |
| )42  | Avenger                         |  | 95-on          |
| )43  | Stratus                         |  | 95-on          |
| 98   | Other automobile                |  |                |
| 199  | Unknown automobile              |  |                |
| 01   | Raider                          | Sport  | 86-on          |
| 21   | Ramcharger                      |  | all            |
| 41   | Vista                           | 4x4  | 84-91          |
| 42   | Caravan                         | Mini-Ram, SE   | 84-on          |
| 61   | B-series vans                   | Sportsman, Royal, Maxiwagon,<br>Ram B150-B350, Tradesman                                     | all            |
| 70   | Van derivative                  | Kary Van   | all            |
| 71   | D50, Colt P/U, RAM50/RAM        | <i>I</i> 100   | all            |
| 72   | Dakota                          |  | 87-on          |

| 481 | D, W-series pickup         | Ram, Custom, Royal, Miser,<br>D100-D350, W100-W350 | all   |
|-----|----------------------------|--|-------|
| 482 | Ram                        | 1500/2500/3500 P/U                                 | 94-on |
| 498 | Other light truck          |  | -     |
| 499 | Unknown light truck        |  | -     |
| 850 | Truck based motorhome      |  | -     |
| 881 | Medium/Heavy CBE           |  | all   |
| 882 | Medium/Heavy COE           | low entry  | all   |
| 883 | Medium/Heavy COE           | high entry   | all   |
| 884 | Medium/Heavy               | unknown engine location                            |       |
| 890 | Medium/Heavy COE           | entry position unknown                             |       |
| 898 | Other medium/heavy truck   |  |       |
| 899 | Unknown Medium/heavy truck | · •  |       |
| 950 | Bus based motorhome        |  | -     |
| 981 | Medium bus                 | (not van based)                                    | -     |
| 988 | Other bus                  |  | •     |
| 989 | Unknown bus                |  | -     |
| 998 | Other vehicle              |  | -     |
| 999 | Unknown vehicle            |  | -     |

#### "08" IMPERIAL

| CODE | MODEL              | INCLUDES                                      | YEAR         |  |
|------|--------------------|---|--------------|--|
| 010  | Imperial           | Lebaron<br>Mark Cross, Frank Sinatra editions | -76<br>81-83 |  |
| 398  | Other automobile   |   | -            |  |
| 399  | Unknown automobile |   | -            |  |
| 998  | Other vehicle      |   | ~            |  |
| 999  | Unknown vehicle    |   | -            |  |

## "09" PLYMOUTH

| CODE | MODEL                          | INCLUDES  | YEAR  |
|------|--------------------------------|---|-------|
| 001  | Valiant/Duster (-76)/<br>Scamp | 100, 200, Brougham, Signet, Custom,<br>Special 340/360, 340, 360, Twister               | -76   |
| 002  | Satellite/Belvedere            | Belvedere I/II, GTX, Roadrunner<br>(-74), Sebring, Sebring Plus,<br>Superbird, Brougham | -74   |
| 003  | Fury                           | I, II, Roadrunner (75),   | -74   |
|      |                                | Salon, VIP, Sport, Suburban   | 75-78 |
| 004  | Gran Fury                      | Sedan, Brougham, Custom<br>Sport, Suburban  | 75-89 |
| 005  | Barracuda                      | Formula, S, 340, AAR, Cuda,<br>Gran Coupe   | 65-74 |
| 006  | Volaré                         | Custom, Premier, Roadrunner (76-on), Police   | 76-80 |
| 007  | Caravelle                      | Turbo, SE   | 85-89 |
| 008  | Horizon                        | TC-3, Miser, Turismo 2.2,<br>Custom, SE, Duster (85-on),<br>America, Expo               | 78-90 |
| 011  | Reliant (K)                    | SE, LE  | 81-89 |
| 013  | Scamp (car based pickup)       | GT, 2.2   | 82-84 |
| 017  | Sundance                       | Turbo   | 87-on |
| 019  | Acclaim                        | LX, LE  | 89-on |

| 020        | Neon                                   | Expresso  | 94 <b>-</b> on |
|------------|--|---|----------------|
| 031        | Cricket                                |   | 71-72          |
| 032        | Arrow                                  | Fire Arrow, GS, GT                                  | 76-80          |
| 033<br>034 | Sapporo<br>Champ/Colt (excludes Vista) | all imported<br>Turbo, Custom-Station Wagon (84-on) | 78-83<br>79-94 |
| 035        | Conquest                               | TSi   | 84-89          |
| 037        | Laser                                  | RS, Turbo   | 89-on          |
| 038        | Breeze                                 |   | 96-on          |
| 039        | Prowler                                |   | 96-on          |
| 398        | Other automobile                       |   |                |
| 399        | Unknown automobile                     |   |                |
| 421        | Trailduster                            |   | all            |
| 441        | Vista                                  | 4x4   | 87-on          |
| 442        | Voyager (minivan)                      | SE, LX  | 84-on          |
| 461        | Van-fullsize (B-series)                | Voyager, Sport, Premier                             | all            |
| 471        | Arrow pickup (foreign)                 |   | all            |
| 498        | Other light truck                      |   | -              |
| 499        | Unknown light truck                    |   | -              |
| 998        | Other vehicle                          |   | -              |
| 999        | Unknown vehicle                        |   | -              |
|            |  |   |                |

## "10" EAGLE

| CODE | MODEL               | INCLUDES   | YEAR  |
|------|---------------------|------------|-------|
| 034  | Summit              | DL, LX, ES | 89-on |
| 037  | Talon               | TSI        | 90-on |
| 040  | Premier             | LX, ES     | 88-92 |
| 041  | Vision              |            | 93-on |
| 044  | Medallion           | DL, LX     | 88-90 |
| 398  | Other automobile    |            | -     |
| 399  | Unknown automobile  |            | -     |
| 441  | Summit Wagon        |            | 92-on |
| 498  | Other light truck   |            | -     |
| 499  | Unknown light truck |            | -     |
| 998  | Other vehicle       |            | -     |
| 999  | Unknown vehicle     |            | -     |

## "12" FORD

| CODE | MODEL                          | INCLUDES   | YEAR  |
|------|--------------------------------|--|-------|
| 001  | Falcon                         | Sprint, GT, Futura   | -70   |
| 002  | Fairlane                       | Torino thru 1970   | -70   |
| 003  | Mustang/Mustang II             | Mach, Boss, Grande, Cobra,<br>Ghia, SVO, GT, LX, Shelby                | 65-on |
| 004  | Thunderbird (all sizes)        | Landau, Heritage, Turbo coupe,<br>Elan, Fila, Sport, LX, SC            | 55-on |
| 005  | LTD II                         | S, Squire, Brougham  | 77-79 |
| 006  | LTD/Custom/Galaxie (all sizes) | XL, Landau, Ranch Wagon,<br>Country Squire, S, 500,<br>Brougham, XL GT | 65-on |

| 007 | Ranchero                        | Falcon/Fairlane based<br>Torino/LTD II based | -71<br>72-79 |
|-----|---------------------------------|--|--------------|
| 800 | Maverick                        | Grabber                                      | 70-78        |
| 009 | Pinto                           | Pony, MPG, ESS                               | 71-80        |
| 010 | Torino/Gran<br>Torino/Elite     | GT, Cobra, Sport,<br>Squire, Brougham        | 71-76        |
| 011 | Granada                         | ESS, Ghia                                    | 75-82        |
| 012 | Fairmont                        | Futura, Sport Coupe                          | 78-83        |
| 013 | Escort/EXP                      | L, GL, GLX, SS, GT, LX                       | 81-on        |
| 015 | Tempo                           | L, GL, GLX, Sport, 4x4                       | 84-94        |
| 016 | Crown Victoria                  |  | 81-on        |
| 017 | Taurus                          | MT-5, L, GL, LX, SHO                         | 86-on        |
| 018 | Probe                           | GL, LX, GT                                   | 88-on        |
| 031 | English Ford                    | Cortina                                      | 60-on        |
| 032 | Fiesta                          | Sport, Ghia                                  | 78-80        |
| 033 | Festiva                         | •  | 88-93        |
| 034 | Laser                           |  | 93-on        |
| 035 | Contour                         |  | 94-on        |
| 036 | Aspire                          |  | 94-on        |
| 398 | Other automobile                |  | all          |
| 399 | Unknown automobile              |  | -            |
| 401 | Bronco II/Bronco (-77) Explorer | Eddie Bauer, XL, XLT Explorer (90-on)        | 83-on        |
| 421 | Bronco-fullsize                 | Eddie Bauer, Custom, XL, XLT                 | 78-on        |
| 441 | Aerostar                        | XLT, Cargo Van                               | 86-on        |
| 442 | Windstar                        |  | 94-on        |
| 461 | E-series vans                   | Econoline, Clubwagon, Chateau, E150-E350     | all          |
| 470 | Van derivative                  | i.e: parcel van                              | ali          |
| 471 | Ranger                          | Supercab, 4x4, STX, Splash                   | 82-on        |
| 472 | Courier                         | Imported pickup                              | all          |
| 481 | F-series pickup                 | F-100 - F-350                                | all          |
| 498 | Other light truck               |  | -            |
| 499 | Unknown light truck             |  | -            |
| 850 | Truck based motorhome           |  | -            |
| 881 | Medium/Heavy CBE                | F-5 thru F-8 L-series, FT-series             | ali          |
| 882 | Medium/Heavy COE                | C/CT series, low entry                       | all          |
| 883 | Medium/Heavy COE                | C/CLT series, high entry                     | all          |
| 884 | Medium/Heavy                    | unknown engine location                      | -            |
| 890 | Medium/Heavy COE                | entry position unknown                       | , <b>-</b>   |
| 898 | Other medium/heavy              | truck  | -            |
| 899 | Unknown medium/heavy            | truck  | -            |
| 950 | Bus based motorhome             |  | -            |
| 981 | Medium bus                      | B-series (not van based)                     | all          |
| 988 | Other bus                       |  | all          |
| 989 | Unknown bus                     |  | -            |
| 998 | Other vehicle                   |  | -            |
| 999 | Unknown vehicle                 |  |              |
|     |                                 |  |              |

#### "13" LINCOLN

| CODE | MODEL                | INCLUDES   | YEAR         |  |
|------|----------------------|--|--------------|--|
| 001  | Continental/Town Car | Continental (-81), Town Car (82 on)                                  | all          |  |
| 002  | Mark                 | I, II, III, IV, V, VI, VII, LSC, VIII All Signature/ Designer Series | 82-on<br>all |  |
| 005  | Continental (82-on)  | All Signature/Designer Series  |              |  |
| 011  | Versailles           |  | 77-80        |  |
| 398  | Other automobile     |  | -            |  |
| 399  | Unknown automobile   |  | -            |  |
| 998  | Other vehicle        |  | -            |  |

## "14" MERCURY (MERKUR: See "56")

| CODE | MODEL              | INCLUDES  | YEAR           |
|------|--------------------|---|----------------|
| 002  | Cyclone            | GT, CJ, Spoiler   | -71            |
| 003  | Capri-domestic     | RS, Turbo, GS, Black Magic  | 79-86          |
| 004  | Cougar/XR7         | XR-7, RS, LS, GS, Eliminator,<br>Brougham, Villager, (includes all body styles) | 67 <b>-</b> on |
| 006  | Marquis/Monterey   | Marauder, X-100, Parklane, S-55,<br>Custom, Brougham, Montclair, Grand Marquis  | 55-on          |
| 800  | Comet              | Caliente, GT, Voyager, 202, Capri (66-67)                                       | 62-77          |
| 009  | Bobcat             | Runabout, Villager  | 75-80          |
| 010  | Montego            | Comet (68-70), GT, MX, Villager,<br>Brougham                                    | 67-76          |
| 011  | Monarch            | Ghia  | 75-80          |
| 012  | Zephyr             | GS, Z-7   | 78-83          |
| 013  | Lynx/LN-7 (82-83)  | L, LS, GS, RS, XR-3   | 81-87          |
| 015  | Topaz              | L, LS, GS, 4x4  | 84-on          |
| 017  | Sable              | LS, GS  | 86-on          |
| 031  | Capri-foreign      | Capri II  | 70-77          |
|      |                    | 2+2   | 89-94          |
| 033  | Pantera            | de Tamaso   | 72-74          |
| 036  | Tracer             | L, GL   | 88-on          |
| 037  | Mystique           |   | 94-on          |
| 398  | Other automobile   |   | -              |
| 399  | Unknown automobile |   | -              |
| 401  | Mountaineer        |   | 96-on          |
| 443  | Villager           | LS, GS  | 93-on          |
| 998  | Other vehicle      |   | -              |
| 999  | Unknown vehicle    |   | -              |

## "18" BUICK

| CODE | MODEL  | INCLUDES   | YEAR  |
|------|--|--|-------|
| 001  | Special/Skylark                              | GS, GS-350, GS-400, GS-455, GS,<br>California, Sport wagon, Custom | -72   |
| 002  | LeSabre/Centurion/<br>Wildcat                | Estate Wagon, Luxus, Invicta,<br>Custom, Limited T-Type            | 55-on |
| 003  | Electra, Electra 225,<br>Park Avenue (91-on) | Limited, Park Avenue, Ultra  | 60-on |
| 004  | Roadmaster                                   | Estate Wagon, Limited  | 91-on |

| 005 | Riviera            | S-Type,T-Type  | 63-on          |
|-----|--------------------|--|----------------|
| 007 | Century            | Luxus, T-Type Luxus, T-Type,<br>FWD (82-on), Custom, Regal (72-77) | 72-on          |
| 008 | Apollo/Skylark     | Skylark (75), S/R  | 73-76          |
| 010 | Regal              | Turbo, Luxus, Grand National, GNX, T-Type                          | 78-88          |
| 012 | Skyhawk            | S-Type, Roadhawk, T-Type, GT                                       | 75-89          |
| 015 | Skylark (76-85)    | (except 75), S/R, S, Limited, Sport, T-Type                        | -85            |
| 018 | Somerset/Skylark   | Skylark (86-on), Somerset GS,<br>Regal, Custom, Limited, T-Type    | 85-on          |
| 020 | Regal (FWD)        | Limited  | 88-on          |
| 021 | Reatta             |  | 88-91          |
| 031 | Opel Kadett        |  | -75            |
| 032 | Opel Manta         | 1900, Luxus, Rallye, Sports Coupe                                  | -75            |
| 033 | Opel GT            |  | -75            |
| 034 | Opel Isuzu         | Deluxe, Sport  | 76 <b>-7</b> 9 |
| 398 | Other automobile   |  | -              |
| 399 | Unknown automobile |  | -              |
| 998 | Other vehicle      |  | -              |
| 999 | Unknown vehicle    |  | -              |

## "19" CADILLAC

| CODE | MODEL                                   | INCLUDES   | YEAR  |  |
|------|---|--|-------|--|
| 003  | Deville/Fleetwood<br>(except Limousine) | Coupe de Ville, Sedan de Ville, Fleetwood,<br>Brougham, Fleetwood, 60 Special, etc.<br>d'Elegance, Concourse | all   |  |
| 004  | Limousine                               | Fleetwood 75, Formal de Ville based  | all   |  |
| 005  | Eldorado                                | Biarritz, El-doro, Touring Coupe   | 67-on |  |
| 006  | Commercial Series                       | Ambulance/Hearse   | all   |  |
| 009  | Allanté                                 |  | 87-on |  |
| 014  | Seville                                 | Elegante, STS  | 76-on |  |
| 016  | Cimarron                                | D'oro  | 82-88 |  |
| 398  | Other automobile                        |  | -     |  |
| 399  | Unknown automobile                      |  | •     |  |
| 998  | Other vehicle                           |  | -     |  |
| 999  | Unknown vehicle                         |  | -     |  |

#### "20" CHEVROLET

| CODE | MODEL           | INCLUDES   | YEAR  |
|------|-----------------|--|-------|
| 001  | Chevelle/Malibu | Classic, Concours, S-3, Laguna,<br>Nomad, 330, Greenbriar, Estate,<br>Deluxe. SS 396/454       | 64-83 |
| 002  | Impala/Caprice  | Biscayne, Belair, Super Sport, Classic,<br>Classic Brougham, Townsman,<br>Brookwood, Kingswood | 55-on |
| 004  | Corvette        | Stingray   | 53-on |
| 006  | Corvair         | Corvair Monza, 500, Corvair<br>Spyder, Corsa   | 60-69 |
| 007  | El Camino       | Royal Knight, SS   | 59-on |
| 800  | Nova (-79)      | Chevy II, LN, LE, Concours<br>SS-350/396, Rally  | 62-79 |
| 009  | Camaro          | SS, RS, LT, Berlinefta, IROC-Z, Z28  | 67-on |

| 010        | Monte Carlo (RWD)                              | LS, SS, Aerocoupe, Landau  | 70-88  |
|------------|--|--|--------|
| 011        | Vega   | GT, Cosworth   | 71-77  |
| 012        | Monza  | Spyder, 2+2, Towne Coupe   | 75-80  |
| 013        | Chevette                                       | S, Scooter, CS   | 76-87  |
| 015        | Citation                                       | X-11, Citation II  | 80-85  |
| 016        | Cavalier                                       | CS, RS, Z24  | 82-on  |
| 017        | Celebrity                                      | CS, Eurosport, VR  | 82-on  |
| 019        | Beretta/Corsica                                | GT   | 87-on  |
| 020        | Lumina   | (GM-10 based), Z-34, Euro  | 90-on  |
| 031        | Spectrum                                       |  | 85-on  |
| 032        | Nova/GEO Prizm                                 | CL, NUMMI-built vehicles   | 85-on  |
| 033        | Sprint/GEO Sprint                              |  | 85-on  |
| 034        | GEO Metro                                      | LSi, XFi   | 89-on  |
| 035        | GEO Storm                                      | GSi  | 85-on  |
| 036        | Monte Carlo (FWD only)                         | Z34  | 95-on  |
| 398        | Other automobile                               |  |        |
| 399        | Unknown automobile                             |  |        |
| 401        | S-10 Blazer, Blazer                            | S-10 p/u based   | 83-on  |
| 402        | GEO Tracker                                    | LSi  | 89-on  |
| 421        | Fullsize Blazer, Tahoe                         | K-series, fullsized p/u based  | 69-on  |
| 431        | Suburban                                       | All models   | all    |
| 441        | Astro Van                                      | Minivan  | 85-on  |
| 442        | Lumina APV                                     |  | 90-on  |
| 461        | G-series van                                   | Beauville, Chevy Van, Sport Van, G10-G30, Express                        | all    |
| 466        | P-series van                                   | •  | all    |
| 470        | Van derivative                                 | Hi-cube, Parcel Van  | all    |
| 471        | S-10/T-10                                      | 4x4  | 82-on  |
| 472        | LUV  | Imported pickup  | all    |
| 481        | C, K, R, V-series pickup                       | C10-C30, K10-K30, R10-R30,<br>VI0-V30, Silverado, C-Kl500,<br>2500, 3500 | all    |
| 498        | Other light truck                              | ,  |        |
| 499        | Unknown light truck                            |  |        |
| 850        | Truck based motorhome                          |  |        |
| 881        | Medium/Heavy CBE                               | C50/60/65, M60/65, H70/80/90,  | all    |
| 882        | Medium/Heavy COE low entry                     | J70/80/90, Bison 90, all other CBE<br>T60/65, all other COE low entry    | ali    |
| 883        | Medium/Heavy COE high entry                    | Titan 90, all other COE high entry                                       | all    |
| 884        | Medium/Heavy                                   | Unknown engine location  | -      |
| 890        | Medium/Heavy COE                               | entry position unknown   | -      |
| 898<br>800 | Other medium/heavy truck                       |  | -      |
| 899<br>950 | Unknown medium/heavy truck Bus based motorhome |  | •      |
| 981        | Bus  | S-60 series  | all    |
| 988        | Other bus                                      | C CO Series  | an     |
| 989        | Unknown bus                                    |  | -      |
| 998        | Other vehicle                                  |  | -<br>- |
| 999        | Unknown vehicle                                |  | •      |
| 117        | CHRIGWII VEIIICIE                              |  | -      |

## "21" OLDSMOBILE

| CODE | MODEL                        | INCLUDES   | YEAR         |
|------|------------------------------|--|--------------|
| 001  | Cutlass (RWD-only)  Delta 88 | Supreme, S, LS, Salon Brougham,<br>Vista Cruiser, F85 (thru 72),<br>Rallye 350, Hurst Olds, 442,<br>Calais, Classic (88)<br>Royale, Custom, Delta, Jetstar 88, | 62-88<br>all |
| 002  | 20.11.00                     | Delmont 88, Starfire (thru 66),<br>Custom Cruiser  |              |
| 003  | Ninety-Eight                 | Regency, Luxury  | all          |
| 005  | Toronado                     | XSR, Trofeo, Brougham Custom   | 66-92        |
| 006  | Commercial Series            | Ambulance/Hearse   | all          |
| 012  | Starfire                     | SX,GT  | 75-80        |
| 015  | Omega                        | All front wheel drive  | 75-85        |
| 016  | Firenza                      | S, LS, SX, Cruiser, GT   | 82-88        |
| 017  | Ciera                        | Cutlass Ciera, Brougham, ES  | 82-on        |
| 018  | Calais                       | GT, ES, 500  | 85-91        |
| 020  | Cutlass (FWD)                | Supreme  | 88-on        |
| 021  | Achieva                      | SC   | 92-on        |
| 022  | Aurora                       |  | 94-on        |
| 398  | Other automobile             |  |              |
| 399  | Unknown automobile           |  |              |
| 401  | Bravada                      |  | 91-on        |
| 441  | Silhouette                   |  | 90-on        |
| 498  | Other light truck            |  |              |
| 499  | Unknown light truck          |  |              |
| 998  | Other vehicle                |  |              |
| 999  | Unknown vehicle              |  |              |

#### "22" PONTIAC

| CODE | MODEL                              | INCLUDES  | YEAR  |
|------|------------------------------------|---|-------|
| 001  | Lemans/Tempest (-79)               | Safari, T-37, Luxury, Grand Sport, GTO (-73),<br>GT-37, Sprint, Judge, Grand AM (73-75),<br>Grand Lemans        | 62-79 |
| 002  | Bonneville/Catalina/<br>Parisienne | Brougham, Grand Safari, Safari,<br>Grandville, 2+2 Executive,<br>Starchief SE, SSE, <i>SSEi</i> ,<br>Parisienne | all   |
| 005  | Fiero                              | 2M4, 2M6, GT, SE  | 84-88 |
| 008  | Ventura                            | II, SJ, Sprint, GTO (74-on), Custom   | 71-77 |
| 009  | Firebird/Trans AM                  | Esprit, Formula, GTA, Redbird,<br>Yellowbird, Skybird, SE   | 67-on |
| 010  | Grand Prix (RWD)                   | J, LJ, SJ, Brougham, 2+2  | 63-87 |
| 011  | Astre                              | Safari, SJ, Custom  | 75-77 |
| 012  | Sunbird (thru 80)                  | Safari, Sport, Formula  | 76-80 |
| 013  | T-1000/1000                        |   | 81-87 |
| 015  | Phoenix                            | LJ, SJ  | 77-84 |
| 016  | J2000/2000/Sunbird<br>Sunfire      | Sunbird (84-on), LE, SE, GT,<br>Convertible, GT/SE  | 82-on |
| 017  | 6000                               | STE, SE, LE   | 82-on |
| 018  | Grand AM                           | SE,LE .   | all   |
| 020  | Grand Prix (FWD)                   | SE  | 88-on |
|      |                                    |   |       |

| 031 | Lemans (88-on)      | SE, Tempest (Canadian) | 88-on |
|-----|---------------------|------------------------|-------|
| 398 | Other automobile    |                        | -     |
| 399 | Unknown automobile  |                        | -     |
| 441 | Trans Sport         |                        | 90-on |
| 498 | Other light truck   |                        | -     |
| 499 | Unknown light truck | •                      | -     |
| 998 | Other vehicle       |                        | -     |
| 999 | Unknown vehicle     |                        | -     |

## "23" GMC

| CODE | MODEL                       | INCLUDES   | YEAR  |   |
|------|-----------------------------|--|-------|---|
| 007  | Caballero/Sprint            | Sierra Madre del Sur, SP   | 65-on | _ |
| 398  | Other automobile            |  | -     |   |
| 399  | Unknown automobile          |  | -     |   |
| 401  | Jimmy/Typhoon               | S15 based  | 83-on |   |
| 421  | Fullsize Jimmy/Yukon        | fullsize pickup based  | all   |   |
| 431  | Suburban                    | all models   | all   |   |
| 441  | Safari (minivan)            |  | 86-on |   |
| 461  | G-series van                | Rally Van, Vandura, G15-G35, Savana                                  | all   |   |
| 466  | P-series van                |  | all   |   |
| 470  | Van derivative              | Hicube, parcel van, Value Van,<br>Magna Van                          | all   |   |
| 471  | S15/Tl5/Sonoma              |  | 82-on |   |
| 481  | C, K, R, V-series pickup    | C15-35, K15-35, R15-35, V15-35, Sierra                               | all   |   |
| 498  | Other light truck           |  | •     |   |
| 499  | Unknown light truck         |  | •     |   |
| 850  | Truck based motorhome       |  | •     |   |
| 881  | Medium/Heavy CBE            | W5000/6000/7000 series,  | all   |   |
| 882  | Medium/Heavy COE low entry  | Brigadier/General models<br>W600O/W7000, all other COE,<br>low entry | all   |   |
| 883  | Medium/Heavy COE high entry | Astro 95, all other COE, high entry                                  | all   |   |
| 884  | Medium/Heavy                | Unknown engine location  | •     |   |
| 890  | Medium/Heavy COE            | entry position unknown   | •     |   |
| 898  | Other medium/heavy truck    |  | -     |   |
| 899  | Unknown medium/heavy truck  |  | -     |   |
| 950  | Bus based motorhome         |  | -     |   |
| 981  | Bus                         | B6000  | ali   |   |
| 988  | Other Bus                   |  | •     |   |
| 989  | Unknown bus                 |  | -     |   |
| 998  | Other vehicle               |  | •     |   |
| 999  | Unknown vehicle             |  | •     |   |

#### **"24" SATURN**

| CODE | MODEL INCLUDES     |               | YEAR  |  |  |
|------|--------------------|---------------|-------|--|--|
| 001  | SL                 | SL1, SL2, SL3 | 91-on |  |  |
| 002  | SC                 | SC1,SC2       | 91-on |  |  |
| 003  | SW                 | SW1, SW2      | 93-on |  |  |
| 398  | Other automobile   |               | -     |  |  |
| 399  | Unknown automobile |               |       |  |  |
| 998  | Other vehicle -    |               |       |  |  |
| 999  | Unknown vehicle    |               |       |  |  |

#### "25" GRUMMAN

| CODE | MODEL   | INCLUDES             | YEAR         |
|------|---|----------------------|--------------|
| 441  | LLV   | Postal vehicle       | all          |
| 442  | Step-in van   | Multi-stop, step van | all          |
| 498  | Other light truck                                       |                      | -            |
| 499  | Unknown light truck                                     |                      | -            |
| 850  | Truck based motorhome                                   |                      | <del>-</del> |
| 881  | Medium/Heavy CBE  |                      | all          |
| 882  | Medium/Heavy COE low entr                               | у                    | all          |
| 883  | Medium/Heavy COE high ent                               | ry                   | all          |
| 884  | Medium/Heavy Unknown                                    |                      | <u>-</u>     |
| 890  | engine location<br>Medium/Heavy COE entry po<br>unknown | sition               | -<br>-       |
| 898  | Other medium/heavy truck                                |                      | -            |
| 899  | Unknown medium/heavy truc                               | k                    | -            |
| 983  | Bus-flat front, rear engine                             | Transit              | all          |
| 988  | Other bus   |                      | -            |
| 989  | Unknown bus   | -                    |              |
| 998  | Other vehicle   | -                    |              |
| 999  | Unknown vehicle   |                      | -            |
|      |   |                      |              |

#### "29" OTHER DOMESTIC MANUFACTURER

| CODE | MODEL             | INCLUDES   | YEAR |
|------|-------------------|--|------|
| 001  | Studebaker/Avanti | Lark, Gran Turismo, Hawk,<br>Cruiser, all associated subseries | -66  |
| 002  | Checker           | Marathon, Superba, Taxi, Aerobus                               | -82  |
| 398  | Other make        | Desoto, Excaliber, Stutz, Hudson, Packard, Consulier           | all  |
| 399  | Unknown make      |  | -    |

#### "30" VOLKSWAGEN

| CODE | MODEL               | INCLUDES                           | YEAR  |  |
|------|---------------------|------------------------------------|-------|--|
| 031  | Karmann Ghia        |                                    | -74   |  |
| 032  | Beetle 1300/1500    | flat windshield                    | -77   |  |
| 033  | Super Beetle        | distinguished by curved windshield | 71-80 |  |
| 034  | 411/412             | Squareback/Fastback                | 71-74 |  |
| 035  | Squareback/Fastback | Type 3, 1600                       | -74   |  |
| 036  | Rabbit              | L, GTI, Sport, LS, Custom, DL,     | 75-84 |  |

|     |                     | Deluxe                        |       |
|-----|---------------------|-------------------------------|-------|
| 037 | Dasher              |                               | 74-81 |
| 038 | Scirocco            | 16V                           | 75-88 |
| 040 | Jetta               | GL, GLI                       | 80-92 |
| 041 | Quantum             | Synco                         | 82-88 |
| 042 | Golf                | Synco, GTI, Cabriolet, GT, GL | 85-92 |
| 043 | Rabbit pickup       | car based pickup              | 80-83 |
| 044 | Fox                 |                               | 87-on |
| 045 | Corrado             |                               | 89-on |
| 046 | Passat              |                               | 90-on |
| 047 | Jetta III           |                               | 93-on |
| 048 | Golf III            |                               | 93-on |
| 398 | Other automobile    |                               |       |
| 399 | Unknown automobile  |                               | -     |
| 401 | The Thing (181)     |                               | 73-75 |
| 441 | Vanagon/Camper      | Bus, Kombi, Van               | all   |
| 442 | Eurovan             |                               | 92-on |
| 498 | Other light truck   |                               | -     |
| 499 | Unknown light truck |                               | -     |
| 998 | Other Vehicle       |                               | -     |
| 999 | Unknown vehicle     |                               | -     |

## "31" ALFA ROMEO

| CODE | MODEL   | INCLUDES  | YEAR  |
|------|---|---|-------|
| 031  | Spider  | All roadsters, Veloce, 1750/2000 roadsters                | all   |
| 032  | Sports Sedan All 4 door sedans Milano (86), Giulia, Super, Berlina, Alfetta, 1750/2000 sedans |   | all   |
| 033  | Sprint Veloce   | All 2-door coupes Alfetta GT,<br>1750/2000 GTV, Sprint GT | all   |
| 034  | GTV-6   |   | 81-on |
| 035  | 164   |   | 89-on |
| 398  | Other automobile  |   | •     |
| 399  | Unknown automobile  |   | -     |
| 998  | Other vehicle   |   | -     |
| 999  | Unknown vehicle   |   | -     |

## "32" AUDI

| CODE | MODEL       | INCLUDES                      | YEAR           |
|------|-------------|-------------------------------|----------------|
| 031  | Super 90    |                               | 70-72          |
| 032  | 100/A6      | S, LS, GL,<br>Quattro (89 on) | 70-77<br>89 on |
| 033  | Fox         |                               | 74-79          |
| 034  | 4000        | Quattro, Coupe GT, CS, S      | 80-88          |
| 035  | 5000        | Quattro, CS, S, Turbo         | 78-88          |
| 036  | 80/90       | Quattro                       | 88-95          |
| 037  | 200         | Quattro                       | 88-92          |
| 038  | V-8 Quattro | •                             | 90-94          |

| 039   | Coupe Quattro      | 90-93 |
|-------|--------------------|-------|
| 040   | \$4/\$6            | 93-on |
| 041   | Cabriolet          | 94-on |
| 042   | A4                 | 96-on |
| S 043 | A3                 | 96-on |
| 044   | A8                 | 96-on |
| 398   | Other automobile   | -     |
| 399   | Unknown automobile | -     |
| 998   | Other vehicle      | -     |
| 999   | Unknown vehicle    | -     |

#### "33" AUSTIN/AUSTIN HEALEY

| CODE | MODEL INCLUDES     |           | YEAR |
|------|--------------------|-----------|------|
| 031  | Marina GT          |           | all  |
| 032  | America            |           | all  |
| 033  | Healey Sprite      |           | all  |
| 034  | Healy 3000         | Healy 100 | all  |
| 035  | Mini               |           | all  |
| 398  | Other automobile   |           | -    |
| 399  | Unknown automobile |           | -    |
| 998  | Other vehicle      |           | -    |
| 999  | Unknown vehicle    |           | -    |

## "34" BMW

| CODE            | MODEL              | INCLUDES  | YEAR  |  |
|-----------------|--------------------|---|-------|--|
| 031             | 1600, 2000         | . Tii, 1800, 2000S                                    | -76   |  |
| 032             | Coupe              | 2800CS, 3.0CS   | 69-76 |  |
| 033             | Bavaria Sedan      | 2500, 2800  | 69-74 |  |
| <b>&gt;</b> 034 | 3-series           | 318i, 318ti, 320i, 325e, 325es, 325I, <i>328</i> , M3 | 77-on |  |
| 035             | 5-series           | 524i, 528i, 530i, 533i, 535i, TD                      | 75-on |  |
|                 |                    | 525i (wagon), M5, 540iA, 540I                         | 77-on |  |
| 036             | 6-series           | 630, 633, 635, csi, M6                                |       |  |
| 037             | 7-series           | 733i, 735i, L7, 740i, 750iL                           | 78-on |  |
| 038             | 8-series           | 850   | 90-on |  |
| 039             | <i>Z3</i>          |   | 96-on |  |
| 398             | Other automobile   |   | -     |  |
| 399             | Unknown automobile |   | -     |  |
|                 |                    |   |       |  |

## Motorcycles

| CODE | MODEL                 |
|------|-----------------------|
| 701  | 0-50cc                |
| 702  | 51-124cc              |
| 703  | 125-349cc             |
| 704  | 350-449cc             |
| 705  | 450-749cc             |
| 706  | 750cc-over            |
| 709  | Unknown cc            |
| 799  | Unknown motored cycle |
| 998  | Other Vehicle -       |
| 999  | Unknown vehicle       |

## "35" NISSAN/DATSUN

| CODE | MODEL                      | INCLUDES                                  | YEAR   |
|------|----------------------------|---|--------|
| 031  | F10                        |   | 77-78  |
| 032  | 200/240 SX                 |   | 78-on  |
| 033  | 1200/210/B210              | Honeybee                                  | 71-82  |
| 034  | Z-car, ZX                  | 240/260/280Z, 300 ZX,Turbo, 2+2           | 70-on  |
| 035  | 310                        |   | 79-82  |
| 036  | 510                        | PL  | 68-73  |
|      |                            |   | 78-81  |
| 037  | 610                        | ·PL                                       | 73-76  |
| 038  | 710                        | PL  | 74-77  |
| 039  | 810/Maxima                 | 77-on                                     |        |
| 040  | Roadster                   | SPL 311, SRL 311, 1600, 2000, convertible | -70    |
| 041  | PL 411, RL 411             |   | -67    |
| 042  | Stanza                     | XE  | 82-92  |
| 043  | Sentra                     |   | 83-on  |
| 044  | Pulsar                     | NX, EXA (86-on)                           | 83-90  |
| 045  | Micra                      |   | 87-on  |
| 046  | NX1600/2000                |   | 92-on  |
| 047  | Altima                     |   | 93-on  |
| 398  | Other automobile           |   |        |
| 399  | Unknown automobile         |   |        |
| 401  | Pathfinder                 | MPV, 4 x 4                                | 86-on  |
| 441  | Van                        | XE, GXE                                   | 87-on  |
| 442  | Axxess                     |   | 89-90  |
| 443  | Quest                      |   | 93-on  |
| 471  | Datsun/Nissan Pickup       | PL620, King Cab, Hardbody                 | 73-on  |
| 498  | Other light truck          | Patrol                                    | (1960) |
| 499  | Unknown light truck        |   |        |
| 883  | Medium/Heavy COE           | high entry                                | all    |
| 898  | Other medium/heavy truck   |   | all    |
| 899  | Unknown medium/heavy truck |   | -      |
| 998  | Other vehicle              |   | -      |
| 999  | Unknown vehicle            |   | -      |

"36" FIAT

| CODE | MODEL                      | INCLUDES               | YEAR           |  |
|------|----------------------------|------------------------|----------------|--|
| 031  | 124 (Coupe/Sedan)          | Sport                  | 67-75          |  |
| 032  | 124 Spider/Racer           | Spider 2000/1500       | 68-83          |  |
| 033  | Brava - 131                |                        | 75-82          |  |
| 034  | 850 (Coupe/Spyder)         |                        | 67-73          |  |
| 035  | 128                        |                        | 72 <b>-7</b> 9 |  |
| 036  | X-1/9                      |                        | 75-83          |  |
| 037  | Strada                     |                        | 79-83          |  |
| 398  | Other automobile           | 600, 1100              | all            |  |
| 399  | Unknown automobile         |                        |                |  |
| 882  | Medium/Heavy COE           | low entry              | all            |  |
| 883  | Medium/Heavy COE           | high entry             | ali            |  |
| 890  | Medium/Heavy COE           | entry position unknown | -              |  |
| 898  | Other medium/heavy truck   |                        | all            |  |
| 899  | Unknown medium/heavy truck |                        | -              |  |
| 998  | Other vehicle              |                        | -              |  |
| 999  | Unknown vehicle            |                        | -              |  |

## "37" HONDA (ACURA: See "54")

| CODE        | MODEL               | INCLUDES                       | YEAR  |  |
|-------------|---------------------|--------------------------------|-------|--|
| 031         | Civic/CRX           | 1300, 1500, CVCC, DX, EX, VX,  | 73-on |  |
|             |                     | S, Si, HF, 4WD Wagon, del Sol  |       |  |
| 032         | Accord              | LX, CVCC, SE-i, LX-i, EX Wagon | 76-on |  |
| 033         | Prelude             | Si                             | 80-on |  |
| 034         | 600                 | Coupe, Sedan                   | all   |  |
| 398         | Other automobile    | all Hondas not listed above    | all   |  |
| 399         | Unknown automobile  |                                | -     |  |
| <b>4</b> 01 | Passport            |                                | 94-on |  |
| 441         | Odyssey             |                                | 95-on |  |
| 498         | Other Light Truck   |                                | 94-on |  |
| 499         | Unknown Light Truck |                                | 94-on |  |

#### **Motorcycles**

| CODE | MODEL      |  |  |
|------|------------|--|--|
| 701  | 0-50cc     |  |  |
| 702  | 51-124cc   |  |  |
| 703  | 125-349cc  |  |  |
| 704  | 350-449cc  |  |  |
| 705  | 450-749cc  |  |  |
| 706  | 750cc-over |  |  |
| 709  | Unknown cc |  |  |
|      |            |  |  |

## All Terrain Cycles/Vehicles

| CODE | MODEL                 |                                  |
|------|-----------------------|----------------------------------|
| 731  | 0-50cc                | includes all ATCs/ATVs           |
| 702  | 51-124                | designed soley for off-road use. |
| 703  | 125-349cc             |                                  |
| 704  | 350-449cc             |                                  |
| 705  | 450-749cc             |                                  |
| 706  | 750cc-over            |                                  |
| 709  | Unknown cc            |                                  |
| 799  | Unknown motored cycle |                                  |
| 998  | Other vehicle         |                                  |
| 999  | Unknown vehicle       |                                  |

## "38" ISUZU

| CODE | MODEL                         | INCLUDES                | YEAR     |
|------|-------------------------------|-------------------------|----------|
| 031  | I-Mark                        | S, RS, Turbo            | 85-89    |
| 032  | Impulse                       | Turbo, RS               | 84-on    |
| 033  | Stylus                        |                         | 90-an    |
| 398  | Other automobile              |                         | -        |
| 399  | Unknown automobile            | •                       | -        |
| 401  | Trooper/Trooper II            | Deluxe, LS              | 84-on    |
| 402  | Rodeo                         |                         | 91-on    |
| 403  | Amigo                         |                         | 89-94    |
| 441  | Oasis                         |                         | 96-on    |
| 471  | P'up (pickup)                 | 4 x 4                   | all      |
| 498  | Other light truck             |                         | <u>-</u> |
| 499  | Unknown light truck           |                         | all      |
| 881  | Medium/Heavy CBE              |                         | all      |
| 882  | Medium/Heavy COE              | low entry               | ail      |
| 883  | Medium/Heavy COE              | high entry              | all      |
| 884  | Medium/Heavy                  | unknown engine location | -        |
| 890  | Medium/Heavy COE              | entry position unknown  | -        |
| 898  | Other medium/heavy truck      |                         | -        |
| 899  | Unknown medium/heavy truck    |                         | -        |
| 950  | Bus based motorhome           |                         | -        |
| 981  | Bus Conventional front engine |                         | <u>.</u> |
| 982  | Bus Front engine/flat front   |                         | -        |
| 983  | Bus Rear engine/flat front    |                         | -        |
| 988  | Other bus                     |                         | -        |
| 989  | Unknown bus                   |                         | -        |
| 998  | Other vehicle                 |                         | -        |
| 999  | Unknown vehicle               |                         | -        |

#### "39" JAGUAR

| "39" JAGUAR    |                     |   |       |  |
|----------------|---------------------|---|-------|--|
| CODE           | MODEL               | INCLUDES  | YEAR  |  |
| 031            | XJ-S Coupe          |   | 76-on |  |
| 032            | XJ6/12 Sedan/Coupe  | L, XJ, C, 340/420 Sedan                               | all   |  |
| 033            | XKE                 | V12, Roadster, 120, 2 + 2                             | all   |  |
| 398            | Other automobile    |   |       |  |
| 399            | Unknown automobile  |   | _     |  |
| 998            | Other vehicle       |   | -     |  |
| 999            | Unknown vehicle     |   | •     |  |
| <del>999</del> | Onknown venicle     |   | -     |  |
|                | 40" LANCIA          |   |       |  |
| CODE           | MODEL               | INCLUDES  | YEAR  |  |
| 031            | Beta Sedan - HPG    |   | 80    |  |
| 032            | Beta Coupe - Zagato |   | 82    |  |
| 033            | Scorpion            |   | 78    |  |
| 398            | Other automobile    |   | -     |  |
| 399            | Unknown automobile  |   | -     |  |
| 998            | Other vehicle       |   | -     |  |
| 999            | Unknown vehicle     |   | -     |  |
| ",             | 41" MAZDA           |   |       |  |
| CODE           | MODEL               | INCLUDES  | YEAR  |  |
| 031            | RX2                 |   | 72-74 |  |
| 032            | RX3                 |   | 72-78 |  |
| 033            | RX4                 |   | 74-78 |  |
| 034            | RX7                 | S, GS, GSL, SE  | 79-on |  |
| 035            | 323/GLC/Protege     | DX, Protege (90-on)                                   | 77-on |  |
| 036            | Cosmo               |   | 76-78 |  |
| 037            | 626                 | GT, GS, GSL, SE                                       | 79-on |  |
| 038            | 808                 |   | 72-77 |  |
| 039            | Mizer               |   | 76    |  |
| 040            | R-100               |   | -72   |  |
| 041            | 616/618             |   | -72   |  |
| 042            | 1800                |   | -72   |  |
| 043            | 929                 |   | 88-on |  |
| )44            | MX-6                | Turbo   | 88-on |  |
| 045            | Miata               |   | 90-on |  |
| 046            | MX-3                |   | 92-on |  |
| 047            | Millenia            |   | 95-on |  |
| 398            | Other automobile    |   | -     |  |
| 399            | Unknown automobile  | •   | •     |  |
| 401            | Navajo              |   | 91-on |  |
| 141            | MPV                 |   | 89-on |  |
| <b>\$</b> 71   | Mazda pickup        | B-2000, B-2200, B-2600, B-4000,<br>Cab Plus, SE-5, LX | all   |  |
| 498            | Other light truck   |   | •     |  |
| 199            | Unknown light truck |   | •     |  |
| 998            | Other vehicle       |   | -     |  |
| 000            |                     |   |       |  |

Unknown vehicle

999

#### "42" MERCEDES BENZ

| CODE | MODEL                                       | INCLUDES   | YEAR  |
|------|---|--|-------|
| 031  | 200/220/230/240/250/<br>260/280/300/320/420 | Sedan and 5 passenger "C" only, SE, CD, D, SD, TD, CE, E. DOES NOT include 280 SE (75 on), | all   |
| 032  | 230/280 SL                                  | 300 SD - see code 037 2 seater only  | all   |
| 033  | 300/350/380/450/500<br>SL, 560 SL           | 2 seater only, 300/500 SL (90-on)  | all   |
| 034  | 350/380/420/450/560                         | SLC  | all   |
| 035  | 280/300 SEL                                 | TD, TD-T, CDT  | all   |
| 036  | 380/420/450/500/560                         | 10, 10-1, 001  | all   |
| 050  | SEL and 500/560 SEC/<br>350 SDL/300 SDL     |  | ui.   |
| 037  | 300 SE/380/450 SE                           | 280 S, 280 SE (75 on), 300 SD<br>Sedan, 350 SD   | all   |
| 038  | 600, 6.9 Sedan                              | Pullman  | all   |
| 039  | 190   | D, TD, 2.3, 2.5  | all   |
| 040  | 300   | CE Cabriolet   | 93-on |
| 041  | 400/500E                                    |  | 92-on |
| 042  | 220/280C                                    |  | 94-on |
| 398  | Other automobile                            |  | -     |
| 399  | Unknown automobile                          |  | -     |
| 470  | Van derivative                              | Kurbstar   | 82-on |
| 498  | Other light truck                           |  | -     |
| 499  | Unknown light truck                         |  | -     |
| 881  | Medium/Heavy CBE                            |  | all   |
| 882  | Medium/Heavy COE                            | low entry  | all   |
| 883  | Medium/Heavy COE                            | high entry   | all   |
| 884  | Medium/Heavy                                | Unknown engine location  | •     |
| 890  | Medium/Heavy COE                            | entry position unknown   | •     |
| 898  | Other medium/heavy truck                    |  | -     |
| 899  | Unknown medium/heavy truck                  |  | •     |
| 950  | Bus based motorhome                         |  | •     |
| 981  | Medium bus                                  |  | all   |
| 988  | Other bus                                   |  | •     |
| 989  | Unknown bus                                 |  | -     |
| 998  | Other vehicle                               |  | -     |
| 999  | Unknown vehicle                             |  | -     |

## "43" MG

| CODE | MODEL              | INCLUDES    | YEAR  |
|------|--------------------|-------------|-------|
| 031  | Midget             | MKIII, 1500 | -79   |
| 032  | MGB                |             | 76-79 |
| 033  | MGB                | GT          | 67-75 |
| 034  | MGA                |             | all   |
| 035  | TA/TC/TD/TF        |             | all   |
| 036  | MGC                | GT          | -69   |
| 398  | Other automobile   | Sport Sedan | •     |
| 399  | Unknown automobile |             |       |

| 998 | Other vehicle   |
|-----|-----------------|
| 999 | Unknown vehicle |

## "44" PEUGEOT

| CODE | MODEL              | INCLUDES                     | YEAR  |
|------|--------------------|------------------------------|-------|
| 031  | 304                |                              | 71-73 |
| 032  | 403                |                              | -67   |
| 033  | 404                |                              | -70   |
| 034  | 504/505            | STI, STX, Turbo, S, GL, GLS, | 70-91 |
|      |                    | Liberte, Station Wagon       |       |
| 035  | 604                | SL, D                        | 77-84 |
| 036  | 405                | Mi-16                        | 89-91 |
| 398  | Other automobile   |                              | -     |
| 399  | Unknown automobile |                              | -     |

## Motorcycles

| CODE | MODEL                 |  |
|------|-----------------------|--|
| 701  | 0-50cc                |  |
| 702  | 51-124cc              |  |
| 709  | Unknown cc            |  |
| 799  | Unknown motored cycle |  |
| 998  | Other vehicle         |  |
| 999  | Unknown vehicle       |  |

## "45" PORSCHE

| CODE | MODEL              | INCLUDES                       | YEAR  |  |
|------|--------------------|--------------------------------|-------|--|
| 031  | 911                | L, S, E, T, SC, Carrera,       | all   |  |
|      |                    | Slopenose, Speedster, Panorama |       |  |
| 032  | 912                | E, T                           | -69   |  |
| 033  | 914                | S, 1.8, 2.0, 914/6             | 70-76 |  |
| 034  | 924                | Turbo, S                       | 77-88 |  |
| 035  | 928                | S                              | 78-on |  |
| 036  | 930                | Turbo                          | 79    |  |
| 037  | 944                | Turbo, S                       | 83-91 |  |
| 038  | 959                |                                | 89-94 |  |
| 039  | 968                |                                | 92-95 |  |
| 040  | 986                |                                | 96-on |  |
| 398  | Other automobile   | Spyder, Speedster, 356         | •     |  |
| 399  | Unknown automobile |                                | -     |  |
| 998  | Other vehicle      |                                | •     |  |
| 999  | Unknown vehicle    |                                | -     |  |

## "46" RENAULT

| CODE | MODEL              | INCLUDES                  | YEAR    |
|------|--------------------|---------------------------|---------|
| 031  | LeCar              | R5                        | 76-83   |
| 032  | Dauphine/10/R-8/   | all models                | -71     |
|      | Caravelle          |                           |         |
| 033  | 12                 | R12L, R12TL               | 72-77   |
| 034  | 15                 | R15, R15TL                | 73-76   |
| 035  | 16                 | R16                       | 69-72   |
| 036  | 17                 | R17, Gordini Coupe, R17TL | 73-80   |
| 037  | RI 8i              | Sportwagon                | 81-on   |
| 038  | Fuego              | TL, TS, GTL, GTS, Turbo   | 82-85   |
| 039  | Alliance/Encore,   | L, DL, Limited, X-37      | 83-on   |
|      | GTA,Convertible    |                           |         |
| 041  | Alpine             | GT                        | 87-on   |
| )44  | Medallion          | DL, LX                    | 87 only |
| )45  | Premier            |                           | 87 only |
| 398  | Other automobile   |                           | -       |
| 199  | Unknown automobile |                           | -       |
| 998  | Other vehicle      |                           | -       |
| 999  | Unknown vehicle    |                           | -       |

## "47" SAAB

| CODE | MODEL             | INCLUDES             | YEAR  |
|------|-------------------|----------------------|-------|
| 031  | 99/99E/900        | S, Turbo, Cabriolet  | all   |
| 032  | Sonnett           | II, III, V-4         | 68-74 |
| 033  | 95/96/97          |                      | -73   |
| 034  | 9000              | S, Turbo, CS (93-on) | 85-on |
| 398  | Other automobile  | Monte Carlo 850      | all   |
| 399  | Unknown autmobile |                      | •     |
| 998  | Other vehicle     |                      | -     |
| 999  | Unknown vehicle   |                      | -     |

## "48" SUBARU

| CODE | MODEL              | INCLUDES                      | YEAR  |
|------|--------------------|-------------------------------|-------|
| 031  | DL/FE/G/GF/GL/GLF/ | 4 wheel drive, Turbo          | 72-94 |
|      | STD/Loyale         |                               |       |
| 032  | Star               |                               | 70-71 |
| 033  | 360                |                               | 69-70 |
| 034  | Legacy             | Brighton, Outback, Outback II | 89-on |
| 035  | XT, XT6            | 4WD Turbo, convertible, DL    | 86-on |
| 036  | Justy              | DL, GL                        | 87-94 |
| 037  | SVX                |                               | 92-on |
| 038  | Impreza            |                               | 93-on |
| 043  | Brat               | DL, GL                        | 78-on |
| 398  | Other automobile   |                               | -     |
| 399  | Unknown automobile |                               | -     |
| 998  | Other vehicle      |                               | •     |
| 999  | Unknown vehicle    |                               | •     |

## **"49" TOYOTA**

| CODE | MODEL               | INCLUDES                            | YEAR          |
|------|---------------------|-------------------------------------|---------------|
| 031  | Corona              | Mark 11, Custom, 1900, 2000, Deluxe | -82           |
| 032  | Corolla             | 1100, 1200, 1600, SR-5, LE,         | 69-85         |
|      |                     | Deluxe, Custom, FX16                | 86-on         |
| 033  | Celica              | 1900, 2000, GT, ST, GTS             | 71-on         |
| 034  | Supra               | Celica Supra, Soarer                | 79-92         |
| 035  | Cressida            |                                     | 78-92         |
| 036  | Crown               | 2300, 2600                          | -71           |
| 037  | Carina              | 2000                                | 72-73         |
| 038  | Tercel              | Corolla Tercel, 4WD Wagon           | 80-on         |
| 039  | Starlet             |                                     | 81-84         |
| 040  | Camry               | LE, Deluxe, XLE, Coupe              | 83-on         |
| 041  | MR-2                |                                     | 85 <i>-95</i> |
| 042  | Paseo               |                                     | 92-on         |
| 043  | Avalon              |                                     | 95-on         |
| 398  | Other automobile    | 2000 GT Coupe (1960s)               | all           |
| 399  | Unknown automobile  |                                     | -             |
| 401  | 4-Runner            |                                     | 85-on         |
| 402  | RAV-4               |                                     | 96-on         |
| 421  | Landcruiser         |                                     | 76-on         |
| 441  | Minivan(84-90)/     | LE, Cargo                           | 84-on         |
|      | Previa (91-on)      |                                     |               |
| 471  | Pickup              | SR-5, Extra Cab, Sport, LN44,       | 74-on         |
|      |                     | Chinook, Wonder Wagon               |               |
| 472  | Takoma              |                                     | 95-on         |
| 481  | T-100               |                                     | 93-on         |
| 498  | Other light truck   |                                     | -             |
| 499  | Unknown light truck |                                     | -             |
| 998  | Other vehicle       |                                     | +             |
| 999  | Unknown vehicle     |                                     | <u>.</u>      |

## "50" TRIUMPH

| CODE | MODEL              | INCLUDES             | YEAR  |
|------|--------------------|----------------------|-------|
| 031  | Spitfire           | I, II, III, IV, 1500 | -81   |
| 032  | GT-6 .             | MK3                  | 67-73 |
| 033  | TR4                | TR2, TR3, TR4A       | -68   |
| 034  | TR6                |                      | 69-76 |
| 035  | TR7/8              |                      | 75-81 |
| 036  | Herald             | Vitesse              | 60-74 |
| 037  | Stag               |                      | 60-74 |
| 398  | Other automobile   | 2000, 1200 series    | -     |
| 399  | Unknown automobile |                      | -     |

## **Motorcycles**

| CODE | MODEL                 |  |
|------|-----------------------|--|
| 701  | 0-50cc                |  |
| 702  | 51-124cc              |  |
| 703  | 125-349cc             |  |
| 704  | 350-449cc             |  |
| 705  | 450-749cc             |  |
| 706  | 750cc-over            |  |
| 709  | Unknown cc            |  |
| 799  | Unknown motored cycle |  |
| 998  | Other vehicle         |  |
| 999  | Unknown vehicle       |  |

## "51" VOLVO (includes Volvo/White and Volvo/GM Heavy Trucks)

| CODE | MODEL                      | INCLUDES                 | YEAR  |
|------|----------------------------|--------------------------|-------|
| 031  | 122                        | S                        | 58-68 |
| 032  | 142/144/145                | S, E, GL, GLS, Deluxe    | 67-74 |
| 033  | 164                        | S, E                     | 69-75 |
| 034  | 240/242/244/245            | DL, GL, GLE, GLT, Deluxe | 75-on |
| 035  | 262/264/265                | GL                       | 76-82 |
| 036  | 1800                       | E, S, ES                 | 60-73 |
| 037  | P-544                      |                          | 47-65 |
| 038  | 760                        | Turbo                    | 83-90 |
|      | 780                        |                          | 87-92 |
| 039  | 740                        | GLE, GE, Turbo, GL       | 85-92 |
| 040  | 940                        | BLE, Turbo, SE           | 91-on |
| 041  | 960                        |                          | 92-on |
| 042  | 850                        | GLT, Wagon               | 93-on |
| 398  | Other automobile           |                          | -     |
| 399  | Unknown automobile         |                          | -     |
| 881  | Medium/Heavy CBE           |                          | all   |
| 882  | Medium/Heavy COE           | low entry                | all   |
| 883  | Medium/Heavy COE           | high entry               | all   |
| 884  | Medium/Heavy               | unknown engine location  | -     |
| 890  | Medium/Heavy COE           | entry position unknown   | -     |
| 989  | Other medium/heavy truck   |                          | all   |
| 899  | Unknown medium/heavy truck | ĸ                        | -     |
| 950  | Bus based motorhome        |                          | -     |
| 981  | Medium bus                 |                          | all   |
| 988  | Other bus                  |                          | all   |
| 989  | Unknown bus                |                          | -     |
| 998  | Other vehicle              |                          | -     |
| 999  | Unknown vehicle            |                          | -     |

## "52" MITSUBISHI

| CODE | MODEL                         | INCLUDES             | YEAR  |
|------|-------------------------------|----------------------|-------|
| 031  | Starion                       | 2+2, LE, Turbo       | 83-90 |
| 032  | Tredia                        | L, LS, Turbo         | 83-88 |
| 033  | Cordia                        | L, Turbo             | 83-88 |
| 034  | Galant                        | ECS, Sigma (thru-88) | 85-on |
| 035  | Mirage                        | L, Turbo             | 85-on |
| 036  | Precis                        |                      | 90-on |
| 037  | Eclipse                       |                      | 90-on |
| 038  | Sigma                         |                      | 89-90 |
| 039  | 3000 GT                       |                      | 91-on |
| 040  | Diamante                      |                      | 92-on |
| 398  | Other automobile              |                      | -     |
| 399  | Unknown automobile            |                      | -     |
| 401  | Montero                       | Sport                | 85-on |
| 441  | Minivan                       | LS                   | 87-on |
| 442  | Expo                          | LRV, Sport           | 92-95 |
| 471  | Pickup                        | Mighty Max, SPX, 4x4 | all   |
| 498  | Other light truck             |                      | -     |
| 499  | Unknown light truck           |                      | -     |
| 882  | Medium/Heavy COE              | low entry, FUSO FE   | all   |
| 898  | Other medium/heavy truck      |                      | -     |
| 899  | Unknown medium/heavy truck    |                      | -     |
| 950  | Bus based motorhome           |                      | -     |
| 981  | Bus Conventional front engine |                      | all   |
| 982  | Bus Front engine/flat front   |                      | all   |
| 983  | Bus Rear engine/flat front    |                      | all   |
| 988  | Other bus                     |                      | -     |
| 989  | Unknown bus                   |                      | -     |
| 998  | Other vehicle                 |                      | -     |
| 999  | Unknown vehicle               |                      | -     |
|      |                               |                      |       |

## "53" SUZUKI

| CODE | MODEL               | INCLUDES         | YEAR  |
|------|---------------------|------------------|-------|
| 031  | SA310               | GLX              | 86-on |
| 034  | Swift               | GTi,GTX          | 89-on |
| 398  | Other automobile    |                  | -     |
| 399  | Unknown automobile  |                  | -     |
| 401  | Samurai             | Standard, Deluxe | 85-95 |
| 402  | Sidekick            |                  | 89-on |
| 403  | X-90                |                  | 96-on |
| 498  | Other light truck   |                  | -     |
| 499  | Unknown light truck |                  | -     |

## Motorcycles

| CODE | MODEL      |  |
|------|------------|--|
| 701  | 0-50cc     |  |
| 702  | 51-124cc   |  |
| 703  | 125-349cc  |  |
| 704  | 350-449сс  |  |
| 705  | 450-749cc  |  |
| 706  | 750cc-over |  |
| 709  | Unknown cc |  |
|      |            |  |

## **ALL TERRAIN CYCLES/VEHICLES**

| CODE | MODEL                 | INCLUDES                         | YEAR |
|------|-----------------------|----------------------------------|------|
| 731  | 0-50cc                | includes all ATCs/ATVs           |      |
| 732  | 51-124                | designed soley for off-road use. |      |
| 733  | 125-349сс             |                                  |      |
| 734  | 350cc or greater      |                                  |      |
| 739  | Unknown cc            |                                  |      |
| 799  | Unknown motored cycle |                                  |      |
| 998  | Other vehicle         |                                  |      |
| 999  | Unknown vehicle       |                                  |      |

## "54" ACURA

| CODE | MODEL              | INCLUDES    | YEAR  |
|------|--------------------|-------------|-------|
| 031  | Integra            | RS, LS      | 86-on |
| 032  | Legend/RL          |             | 86-on |
| 033  | NSX                | NSX-T       | 91-on |
| 034  | Vigor/TL           | TL2.5/TL3.2 | 92-96 |
| 035  | CL                 | Coupe       | 96-on |
| 398  | Other automobile   |             | -     |
| 399  | Unknown automobile |             | -     |
| 401  | SLX                |             | 96-on |
| 998  | Other vehicle      |             | -     |
| 999  | Unknown vehicle    |             | -     |
|      |                    |             |       |

## "55" HYUNDAI

| 031       Pony       84-88         032       Excel       GL, GLS       84-94         033       Sonata       89-on         034       Scoupe       91-95         035       Elantra       92-on         036       Accent       95-on         398       Other automobile       - | CODE | MODEL            | INCLUDES | YEAR  |
|--|------|------------------|----------|-------|
| 033       Sonata       89-on         034       Scoupe       91-95         035       Elantra       92-on         036       Accent       95-on   | 031  | Pony             |          | 84-88 |
| 034       Scoupe       91-95         035       Elantra       92-on         036       Accent       95-on  | 032  | Excel            | GL, GLS  | 84-94 |
| 035       Elantra       92-on         036       Accent       95-on   | 033  | Sonata           |          | 89-on |
| 036 Accent 95-on   | 034  | Scoupe           |          | 91-95 |
|  | 035  | Elantra          |          | 92-on |
| 398 Other automobile -   | 036  | Accent           |          | 95-on |
|  | 398  | Other automobile |          | -     |

| 399 | Unknown automobile | - |
|-----|--------------------|---|
| 998 | Other vehicle      | - |
| 999 | Unknown vehicle    | - |

## "56" MERKUR

| CODE | MODEL              | INCLUDES | YEAR  |
|------|--------------------|----------|-------|
| 031  | XR4Ti              | Turbo    | 85-89 |
| 032  | Scorpio            | Tu rbo   | 87-90 |
| 398  | Other automobile   |          | -     |
| 399  | Unknown automobile |          | •     |
| 998  | Other vehicle      | ·        | -     |
| 999  | Unknown vehicle    |          | •     |

## "57" YUGO

| MODEL              | INCLUDES   | YEAR   |
|--------------------|--|--|
| GV                 | GVX, Cabriolet                                       | 86-92  |
| Other automobile   |  | -  |
| Unknown automobile |  | -  |
| Other vehicle      |  | -  |
| Unknown vehicle    |  | -  |
|                    | GV Other automobile Unknown automobile Other vehicle | GV GVX, Cabriolet  Other automobile  Unknown automobile  Other vehicle |

## "58" INFINITI

| CODE             | MODEL              | INCLUDES | YEAR  |
|------------------|--------------------|----------|-------|
| 031              | M30                |          | 90-92 |
| 032              | Q45                |          | 90-on |
| > <sub>033</sub> | G20                |          | 91-96 |
| 034              | J30                |          | 93-on |
| 035              | I30                |          | 96-on |
| 398              | Other automobile   |          | -     |
| 399              | Unknown automobile | •        | -     |
| 998              | Other vehicle      |          | -     |
| 999              | Unknown vehicle    |          | -     |

## "59" LEXUS

| CODE | MODEL              | INCLUDES     | YEAR  |
|------|--------------------|--------------|-------|
| 031  | ES-250/ES-300      |              | 90-on |
| 032  | LS-400             |              | 90-on |
| 033  | SC-300/SC-400      | 2 door Coupe | 92-on |
| 034  | GS-300             |              | 94-on |
| 398  | Other automobile   |              | -     |
| 399  | Unknown automobile |              | -     |
| 421  | LX-450             |              | 96-on |
| 498  | Other Light Truck  |              | 96-on |
| 499  | Unknon Light Truck |              | 96-on |

| 998 | Other vehicle   | - |
|-----|-----------------|---|
| 999 | Unknown vehicle | - |

## "60" DAIHATSU

| CODE | MODEL               | INCLUDES | YEAR  |
|------|---------------------|----------|-------|
| 031  | Charade             |          | 90-92 |
| 398  | Other automobile    |          | -     |
| 399  | Unknown automobile  |          | -     |
| 401  | Rocky               |          | 90-92 |
| 498  | Other light truck   |          | -     |
| 499  | Unknown light truck |          | -     |
| 998  | Other vehicle       |          | -     |
| 999  | Unknown vehicle     |          | -     |

## "61" STERLING

| CODE | MODEL                | INCLUDES | YEAR  |  |  |
|------|----------------------|----------|-------|--|--|
| 031  | 827S                 | Li       | 86-91 |  |  |
| 398  | Other automobile -   |          |       |  |  |
| 399  | Unknown automobile - |          |       |  |  |
| 998  | Other vehicle -      |          |       |  |  |
| 999  | Unknown vehicle      |          | -     |  |  |

# "62" ROVER

| CODE | MODEL                      | INCLUDES  | YEAR           |  |
|------|----------------------------|-----------|----------------|--|
| 401  | Discovery (LR)             |           | 94-on          |  |
| 402  | Defender 90 (LR)           |           | 94 <b>-</b> on |  |
| 421  | County LWB (RR)/County Cla | ssic (RR) | all            |  |
| 422  | 4.0 SE (RR)                |           | 95-on          |  |
| 498  | Other Light Truck          |           | all            |  |
| 499  | Unknown Light Truck        |           | ali            |  |
| 998  | Other vehicle              |           | •              |  |
| 999  | Unknown vehicle            |           | -              |  |

### "63" KIA

| CODE        | MODEL              | INCLUDES | YEAR         |  |
|-------------|--------------------|----------|--------------|--|
| 031         | Sephia             |          | all          |  |
| 398         | Other automobile   |          | -            |  |
| 399         | Unknown automobile |          | -            |  |
| <b>4</b> 01 | Sportage           |          | 96-on        |  |
| 998         | Other vehicle      |          | <del>-</del> |  |
| 999         | Unknown vehicle    |          | _            |  |

## **"69" OTHER FOREIGN**

| CODE | MODEL               | INCLUDES                             | YEAR |
|------|---------------------|--------------------------------------|------|
| 031  | Aston Martin        | Lagonda, Vantage, Volante,<br>Saloon | all  |
| 032  | Bricklin            |                                      | all  |
| 033  | Citreon             |                                      | all  |
| 034  | Delorean            |                                      | all  |
| 035  | Ferrari             |                                      | all  |
| 036  | Hillman             |                                      | all  |
| 037  | Jensen              | Healy                                | all  |
| 038  | Lamborghini         | Countach 5000S, Jalpa                | all  |
| 039  | Lotus               | Europe, Esprit                       | all  |
| 040  | Maserati            | Biturbo                              | all  |
| 041  | Morris              | Minor                                | all  |
| 042  | Rolls Royce/Bentley | Cloud/shadow series                  | al!  |
| 044  | Simca               |                                      | all  |
| 045  | Sunbeam             |                                      | all  |
| 046  | TVR                 |                                      | all  |
| 048  | Desta               |                                      | all  |
| 049  | Reliant             |                                      | all  |
| 052  | Bertone             | X/19                                 | all  |
| 053  | Lada                |                                      | all  |
| 398  | Other make          | Morgan, Singer                       | all  |
| 399  | Unknown make        |                                      | -    |
|      |                     |                                      |      |

## Vehicle Classification: Motored Cycle/ATC/ATV

| Variable V03    |            |      |               | Variable V04 |                                |     |
|-----------------|------------|------|---------------|--------------|--------------------------------|-----|
| Vehicle Make    |            | Code | Vehicle Model | Code         |                                |     |
|                 | MC         | ATC  | ATV           |              | Motored Cycles                 |     |
| BMW             | x          |      |               | 34           | 0-50cc                         | 701 |
| Honda           | x          | x    | x             | 37           | 51-124cc                       | 702 |
| Peugeot         | <b>x</b> · |      |               | 44           | 125-349cc                      | 703 |
| Triumph         | x          |      |               | 50           | 350-449сс                      | 704 |
| Suzuki          | x          | x    | x             | 53           | 450-749cc                      | 705 |
| BSA             | x          |      |               | 70           | 750cc-or greater               | 706 |
| Ducati          | x          |      |               | 71           | Unknown cc                     | 709 |
| Harley-Davidson | x          |      |               | 72           | All Terrain<br>Cycles/Vehicles |     |
| Kawasaki        | x          | x    | x             | 73           | 0-50cc                         | 731 |
| Moto-Guzzi      | x          |      | x             | 74           | 51-124cc                       | 732 |
| Norton          | x          |      |               | 75           | 125-349сс                      | 733 |
| Yamaha          | x          | x    | x             | 76           | 350cc or greater               | 734 |
| Other make      | x          |      |               | 78           | Unknown cc                     | 739 |
| moped           |            |      |               | 79           | Other motored cycle            | 798 |
| Other make      | x          | x    | x             |              |                                |     |
| motorized cycle |            |      |               |              |                                |     |

Variable V03

Vehicle Make

Code

Wehicle Model

MC ATC ATV

Motored Cycles

Unknown make

99

Unknown 799

#### "84" INTERNATIONAL HARVESTER

| CODE | MODEL                        | INCLUDES  | YEAR |
|------|------------------------------|---|------|
| 421  | Scout                        | Scout II, Utility pickup, SS-2,<br>Roadstar, 800 series, Traveler,<br>Terra Traveltop | all  |
| 431  | Travelall                    | 1010-1210, 100-200  | all  |
| 466  | Multistop Van                | Metro RM, 120-160, MS 1210,<br>MS 1510  | all  |
| 481  | Pickup                       | R-100-500, 900A-1 500C/D,<br>1010-1510  | all  |
| 498  | Other light truck            |   |      |
| 499  | Unknown light truck          | •   |      |
| 850  | Truck based motorhome        |   |      |
| 881  | Medium Heavy - CBE           | Loadstar/Fleetstar, Paystar,<br>CBE Transtar, 4200, S-series<br>Mixer                 | all  |
| 882  | Medium/Heavy COE low entry   | CO, VCO, DCO, 190-1950,<br>Cargostar, LFM, 5370                                       | all  |
| 883  | Medium/Heavy COE high entry  | DCO, DCOT, UCO, VCOT,<br>405-series, COE Transtar,<br>Unistar, Conco 707B, 9600       | all  |
| 884  | Medium/Heavy                 | unknown engine location   | •    |
| 890  | Medium/Heavy COE             | entry position unknown  | -    |
| 898  | Other medium/heavy truck     | firetruck-R14O-R301, C08190   | all  |
| 899  | Unknown medium/heavy truck   |   | -    |
| 950  | Bus based Motorhome          |   | all  |
| 981  | Conventional bus             | Ri53-1853 - Loadstar,<br>1603-1853  | all  |
| 982  | Bus-flat front, front engine | 173FC,183FC   | all  |
| 983  | Bus-flat front, rear engine  | 183RE, 193RE-transit  | all  |
| 988  | Other bus                    |   | •    |
| 989  | Unknown bus                  |   | -    |
| 998  | Other vehicle                |   | -    |
| 999  | Unknown vehicle              |   | -    |

## Vehicle Classification: Medium/Heavy Trucks and Buses Variable V03 Variable V04

Vehicle Make Vehicle Model Code Code Truck Bus 03 Truck based motorhome 850 AM General x x 881 07 Medium/Heavy CBE Dodge x 882 12 Medium/Heavy COE-low entry Ford x х Chevrolet x 20 Medium/Heavy COE-high entry 883 x 23 Medium/Heavy Unknown 884 **GMC** x x

| Grumman            | x | x | 25 | engine location               |     |
|--------------------|---|---|----|-------------------------------|-----|
| Nissan/Datsun      | x |   | 35 | Medium/Heavy COE-entry        | 890 |
| Fiat               | x |   | 36 | position unknown              |     |
| Isuzu              | x | x | 38 | MediunVHeavy - Other          | 898 |
| Mercedes Benz      | x | x | 42 | Unknown medium/heavy truck    | 899 |
| Volvo              | x | x | 51 |                               |     |
| Mitsubishi         | x |   | 52 |                               |     |
| Brockway           | x |   | 80 | Bus based motorhome           | 950 |
| Diamond            | x |   | 81 | Bus-conventional front engine | 981 |
| Reo/Reo            |   |   |    | Bus - front engine/flat front | 982 |
| Freightliner/White | x |   | 82 | Bus - rear engine/flat front  | 983 |
| FWD                | x |   | 83 | Other Bus                     | 988 |
| International      | x | x | 84 | Unknown Bus                   | 989 |
| Harvester/Navistar |   |   |    |                               |     |
| Kenworth           | x |   | 85 | Other vehicle                 | 998 |
| Mack               | x |   | 86 | Unknown vehicle               | 999 |
| Peterbilt          | x |   | 87 |                               |     |
| lveco/Magirus      | x |   | 88 |                               |     |
|                    |   |   |    |                               |     |

## Vehicle Classification: Medium/Heavy Trucks and Buses Variable V03 Variable V04

| Vehicle Make Code                |    | variable vu4                            |      |  |
|----------------------------------|----|---|------|--|
|                                  |    | Vehicle Model                           | Code |  |
| Other: (if code "98" is used for | 98 | Autocar                                 | 801  |  |
| V03, then V04 must be            |    | Auto-Union-DKW                          | 802  |  |
| 801-807, 850, 898, 902,          |    | Divco                                   | 803  |  |
| 950, 988, 989,or 998,            |    | Western Star                            | 804  |  |
| irrespective of Body Type)       |    | Oshkosh                                 | 805  |  |
|                                  |    | Hino                                    | 806  |  |
|                                  |    | Scania                                  | 807  |  |
|                                  |    | Truck based motorhome                   | 850  |  |
|                                  |    | Other truck: e.g., Maron, Ward LaFrance | 898  |  |
|                                  |    | Neoplan (bus)                           | 902  |  |
|                                  |    | Bus based motorhome                     | 950  |  |
|                                  |    | Other bus                               | 988  |  |
|                                  |    | Unknown bus                             | 989  |  |
|                                  |    | Other vehicle                           | 998  |  |

## Remarks

For the purposes of the Model codes the following applies.

| 001 | - | 399  | Passe | nger vehicles          |
|-----|---|------|-------|------------------------|
|     |   | 398  | Other | automobile             |
|     |   | 399  | Unkn  | own automobile         |
| 401 | - | 499  | Light | trucks                 |
|     |   | 401- | 420   | Compact utilities      |
|     |   | 421- | 430   | Large Utilities        |
|     |   | 431- | 440   | Utility station wagons |

- 441- 460 Minivans
- 461- 470 Large vans
- 471- 480 Compact pickups
- 481- 490 Large pickups
- 498 Other light truck
- 499 Unknown light truck
- 701 799 Motored Cycles/ATCs/ATVs

#### (701-709 motorcycles/mopeds)

- 701 0-50cc
- 702 51-124cc
- 703 125-349cc
- 704 350449cc
- 705 450-749cc
- 706 750cc or greater
- 709 Unknown cc

#### (731-739 ATCs/ATVs)

- 731 0-55cc
- 732 51-124cc
- 733 125-349cc
- 734 350cc or greater
- 739 Unknown cc
- 798 Other motored cycle
- 799 Unknown motored cvclc
- 801 899 Medium/Heavy trucks
  - 850 Truck based motorhome
  - 881 Medium/Heavy CBE
  - 882 Medium/Heavy COE low entry
  - 883 Medium/Heavy COE high entry
  - 884 Medium/Heavy unknown engine location
  - 890 Medium/Heavy COE entry position unknown
  - 898 Other medium/heavy truck
  - 899 Unknown medium/heavy truck

| 901 | - | 989 | Buses   |
|-----|---|-----|---|
|     |   | 950 | Bus based motorhome                               |
|     |   | 981 | Conventional front engine bus                     |
|     |   | 982 | Bus - Front engine/flat front                     |
|     |   | 983 | Bus - Rear engine/flat front                      |
|     |   | 988 | Other bus   |
|     |   | 989 | Unknown bus                                       |
|     |   | 998 | Other vehicle (i.e., farm vehicle, go-kart, etc.) |
|     |   | 999 | Unknown vehicle                                   |
|     |   |     |   |

# V05 Body Type

## **Element Values**

#### **Automobiles**

| Λ1 | Convertible (excludes sun-roof, t-bar) |
|----|--|
| 01 | Convertible (excludes sun-roof, t-bar) |

- 02 2-Door Sedan, Hardtop, Coupe
- 03 3-Door/2-Door Hatchback
- 04 4-Door Sedan, Hardtop
- 05 5-Door/4-Door Hatchback
- Of Station Wagon (excluding van and truck based)
- 07 Hatchback, Number Of Doors Unknown
- 08 Other Automobile Type
- 09 Unknown Automobile Type

#### **Automobile Derivatives**

- Auto Based Pickup (includes El Camino, Caballero, Ranchero, Brat, and Rabbit Pickup)
- 11 Auto Based Panel (Cargo Station Wagon, auto based Ambulance/Hearse)
- 12 Large Limousine (More than four side doors or stretched chassis)
- 13 Three Wheel Automobile or Automobile Derivative

#### **Utility Vehicles**

- Compact Utility (Jeep CJ-2 CJ-7, Scrambler, Golden Eagle, Renegade, Laredo, Wrangler, Cherokee (84 and after), Dispatcher, Raider, Bronco II, Bronco (before 77), Explorer, S-10 Blazer, Geo Tracker, Bravada, S15 Jimmy, Thing, Pathfinder, Trooper, Trooper II, Rodeo, Amigo, Navajo, 4-Runner, Montero, Passport, Samurai, Sidekick, and Rocky)
- Large Utility (Jeep Cherokee (83 and before), Ramcharger, Trailduster, Bronco-full-size (78 and after), full-size Blazer, fullsize Jimmy, Hummer, Land Cruiser, Rover, Scout and Yukon)
- Utility Station Wagon (Chevrolet Suburban, GMC Suburban, Travelall, Grand Wagoneer; also includes suburban limousine)
- 19 Utility Vehicle, Unknown Body Type

#### Van Based Light Trucks (< 4500 kg GVWR)

- 20 Minivan (Chrysler Town and Country, Caravan, Grand Caravan, Voyager, Grand Voyager, Mini-Ram, Dodge/Plymouth Vista, Aerostar, Windstar, Villager, Lumina APV, Silhouette, Trans Sport, Astro, Safari, Vanagon/Camper, Toyota Van and Minivan, Previa, Nissan Minivan, Quest, Expo Wagon, and Mitsubishi Minivan)
- Large Van (B150-350, Sportsman, Royal, Maxiwagon, Ram, Tradesman, Voyager (83 and before), E150-350, Econoline, Clubwagon, Chateau, G10-G30, Chevy Van, Beauville, Sport Van, G15-G35, Rally Van, and Vandura).
- 22 Step Van or Walk-in Van (< 4,500 kg GVWR)
- 23 Van Based Motorhome
- 24 Van Based School Bus
- 25 Van Based Other Bus
- 28 Other Van Type (Hi-Cube, Kary)
- 29 Unknown Van Type

#### Light Conventional Trucks (pickup style cab< 4500 kg GVWR)

- Compact Pickup (D50, Colt P/U, Ram 50, Ram 100, Dakota, Arrow Pickup (foreign), Ranger, Courier, S-10, T-10, LUV, S-15, T-15, Sonoma, Datsun/Nissan Pickup, P'up, Mazda Pickup, Toyota Pickup, Mitsubishi Pickup)
- Large Pickup (Jeep Pickup, Comanche, Ram Pickup, D100-D350, W100-W350, F100-F350, C10-C35, K10-K35, R10-R35, V10-V35, Silverado, Sierra, R100-R500, T100)
- 32 Pickup With Slide-In Camper
- 33 Convertible Pickup
- 39 Unknown (Pickup Style) Light Conventional Truck

#### Other Light Trucks (< 4500 kg GVWR)

- 40 Cab Chassis Based (includes Rescue Vehicle, Light Stake, Dump, and Tow Truck)
- 41 Truck Based Panel
- 42 Light Truck Based Motorhome (Chassis Mounted)
- 45 Other Light Truck Type
- 48 Unknown Light Truck Type (Utility, Van, Pickup, or Other Light Truck)
- 49 Unknown Light Vehicle Type (Automobile, Utility, Van, or Light Truck)

#### Buses (excludes van based)

- 50 School Bus (designed to carry students, not cross country or transit)
- 58 Other Bus Type (transit, intercity, bus based motorhome)
- 59 Unknown Bus Type

#### Medium/Heavy Trucks ( > 4500 kg GVWR)

- 60 Step Van
- 64 Single Unit Straight Truck
- 65 Medium/Heavy Truck Based Motorhome
- Truck-Tractor (Cab Only, or with any number of trailing units)
- 78 Unknown Medium/Heavy Truck Type
- 79 Unknown Truck Type (light/medium/heavy)

### Motored Cycles (does not include all-terrain vehicles/cycles)

- 80 Motorcycle
- 81 Moped (motorized bicycle)
- Three Wheeled Motorcycle Or Moped
- 88 Other Motored Cycle Type (minibike, motorscooter)
- 89 Unknown Motored Cycle Type

#### **Other Vehicles**

- 90 ATV (All-Terrain Vehicle) and ATC (All-Terrain Cycle)
- 91 Snowmobile
- 92 Farm Equipment Other Than Trucks
- 93 Construction Equipment Other Than Trucks (includes graders)
- 97 Other Type Vehicle (includes go-cart, fork lift, city street sweeper)
- 99 Unknown Body Type

#### Remarks

#### **Automobiles**

Elements "01"-"09" are used to describe different types of passenger cars. These light vehicles, referred to as automobiles, are designed primarily to transport passengers.

Element "01" [Convertible excludes sun-roof and t-bar] takes priority over 2-door (elements "02" and "03") or 4-door (elements "04" and "05") codes.

Element "08" (Other Automobile Type) refers to any passenger car that cannot be described by elements "01" through "07" or "10" through "13".

Enter "09" (Unknown Automobile Type) when it is known that the vehicle is a passenger car, but there is insufficient data to determine the type.

#### **Utility Vehicles**

Enter "19" (Utility Vehicle, Unknown Body Type) when it is known that the vehicle is a utility vehicle, but there is insufficient data to determine the specific type.

### Van Based Light Trucks (< 4,500 kg GVWR)

Enter "22" [Step Van or Walk-In Van (< 4,500 kg GVWR)] when the van is a multi-stop delivery vehicle with a GVWR less than or equal to 4,500 kilograms. Examples are the Grumman LLV used by the US Postal Service or the Aeromate manufactured by Utilimaster Motor Corporation.

Enter "24" (Van Based School Bus) when a passenger van is designed to carry students (passengers) to and from educational facilities and/or related functions. The vehicles are characteristically painted yellow and clearly identified as school buses. Use this code regardless of whether the vehicle is owned by a school system or a private company. Van based school buses converted for other uses (e.g., church bus) also take this value.

Enter "25" (Van Based Other Bus) if the vehicle is a van derivative (e.g., taxi, small local transit) designed to carry passengers for low occupancy functions or purposes. Van based school buses do not use this code.

Enter "28" (Other Van Type) if a van cannot be defined by elements "20"-"25".

Enter "29" (Unknown Van Type) when it is known that this vehicle is a light van, but its specific type cannot be determined.

#### Light Conventional Trucks (Pickup Style Cab, <4,500 kg GVWR)

Enter "33" (Convertible Pick-Up) when a pick-up truck is equipped with removable or retractable roof. To qualify for this code, the entire roof must open. This code takes priority over compact and standard pickups (codes "30" and "31").

Enter "39" [Unknown (pickup style) Light Conventional Truck] when this vehicle qualifies for an element in the "30" to "33" range, but there is insufficient data to determine the specific element.

### Other Light Trucks (< 4,500 kg GVWR)

Element "40" [Cab Chassis Based (includes rescue vehicle, light stake, dump, and tow truck)] also includes pickup based ambulances and tow trucks.

Enter "45" (Other Light Truck Type) when the light conventional truck body type cannot be described in codes "30"-"39" or "40"-"42".

Enter "48" [Unknown Light Truck (Utility, Van, Pickup, or Other Light Truck)] when it is known that the vehicle is a light truck chassis based vehicle, but insufficient data exits to choose between codes "19", "29", "39", or "40"-"42".

Enter "49" [Unknown Light Vehicle Type (automobile, utility, van, or light truck)] when it is known that the vehicle is a light vehicle, but insufficient data exist to specify between elements "09", "10"-"19", "29", "39", or "40"-"48".

#### **Buses Excludes Van Based**

Elements "50", "58", and "59" are defined as any medium/heavy motor vehicle designed primarily to transport large groups of passengers.

Enter "50" [School Bus Type (designed to carry students, not cross country or transit)] when a bus is designed to carry passengers to and from educational facilities and/or related functions. The vehicles are characteristically painted yellow and clearly identified as school buses. Use this code regardless of whether the vehicle is owned by a school system or a private company. School buses converted for other uses (e.g., church bus) also take this value.

Enter "58" [Other Bus Type (e.g., transit, intercity, bus based motorhome)] if the vehicle is a transport device designed to carry passengers for longer periods of time. These vehicles may be classified as over-the-road, transit, intercity, bus related motorhome (other than school bus based), or other.

Enter "59" (Unknown Bus Type) when it is known the transport device is a bus but there is insufficient data to choose between elements "50" and "58".

### Medium/Heavy Trucks (> 4,500 kg GVWR)

Elements "64" and "65" describe a single unit truck specifically designed for carrying cargo on the same chassis as the cab.

Element "66" pertains to a truck-tractor designed for towing trailers or semi-trailers. Although towing is their primary purpose, some truck-tractors are equipped with cargo areas located rearward of the cab.

Enter "64" [Single Unit Straight Truck (GVWR Unknown)] when the non-articulated truck is designed to carry cargo. The gross vehicle weight rating of the vehicle must exceed 4,500 kilograms.

Enter "65" (Medium/Heavy Truck Based Motorhome) when a recreational vehicle is mounted on a single unit medium/heavy truck chassis.

Enter "66" [Truck-Tractor (cab only, or with any number of trailing units; any weight, or unknown if pulling trailer)] when the power unit is a fifth-wheel equipped truck-tractor. The number of trailers being pulled is not a consideration.

Enter "78" (Unknown Medium/Heavy Truck Type) when it is unknown whether the medium/heavy truck is a single unit truck or a truck-tractor and/or trailer combination and it is known that the vehicle is either a medium (4,500 kg to 12,000 kg) or a heavy truck (>12,000 kg GVWR).

Enter "79" [Unknown Truck Type (light/medium/heavy)] when it is known that this vehicle is a truck, but there is insufficient data to classify the vehicle further.

## Motored Cycles (does not include all-terrain vehicles/cycles)

Elements "80"-"89" define types of motored cycles.

Enter "80" (Motorcycle) when the vehicle is a two-wheeled open (i.e., no enclosed body) vehicle propelled by an internal combustion engine.

Enter "81" [Moped (motorized bicycle)] when the vehicle is a motorized bicycle capable of moving either by pedaling or by an internal combustion engine.

Enter "82" (Three Wheeled Motorcycle or Moped) when the vehicle would otherwise qualify for elements "80" or "81" above except for the presence of a third wheel. Motorcycles equipped with a side car take this value.

Enter "88" [Other Motored Cycle Type (minibike, motor scooter)] when the vehicle in question does not qualify for codes "80" through "82" (e.g., motor scooter).

Enter "89" (Unknown Motored Cycle Type) when it is known that the vehicle is a motored cycle, but no further data is available.

#### Other Vehicles

Enter "90" [ATV (all-terrain vehicle including dune/ swamp buggy) and ATC (all-terrain cycle)] if the vehicle is an off-road recreational vehicle which can not be licensed for use on public roadways. ATCs have 4 or more wheels and ATCs have 2 or 3 wheels. Included in this element are "dirt bikes". This element also can be used if an amphibious vehicle, "dune buggy" or "swamp buggy" is encountered. These latter vehicles may or may not be licensed for use on public roadways.

Enter "91" (Snowmobile) if the vehicle was manufactured for off-road recreational use in the snow.

Enter "92" (Farm Equipment Other Than Trucks) if this vehicle is designed specifically for farming operations. The vehicles are usually implements other than trucks propelled by an internal combustion engine (e.g., farm tractors, combines, etc.).

Enter "93" (Construction Equipment Other Than Trucks) if the vehicle is construction equipment other than trucks, which is propelled by an internal combustion engine (e.g., bulldozer, roadgrader, etc.). This element excludes passenger vehicles which are owned/leased and operated by construction related firms.

Enter "97" (Other Vehicle Type) when the motorized vehicle in question does not qualify for codes "90"-"93" (e.g., go-kart, dune buggy, "kit" car, etc.).

Use the elements "09", "29", "39", "48", "49", "59", "78", "79", "89", or "97" when the make and model of a vehicle are not known but some detail concerning the body type is known {e.g., a hit-and-run vehicle described as a "pickup truck" would be coded as "39" Unknown (pickup style) Light Conventional Truck}. These elements would normally be used when the Vehicle Make (V03) and Vehicle Model (V04) are coded as Unknown "99" (V03) and "999" (V04) respectively.

#### Unknown

**Enter "99" (Unknown Body Type)** when there is no available information regarding the type of vehicle. This lack of information prohibits the accurate classification of this vehicle within one of the preceding elements.

## **Consistency Check**

|          |       |  | V05   |
|----------|-------|--|---|
|          |       | IF   | THEN  |
|          | AV100 | STRATUM (A23) equals 3 or 4 and BODY TYPE (V5) equals 01-49                                    | MANNER OF LEAVING SCENE (V19) should not equal 2 or 3.                |
|          | AV121 | STRATUM (A23) equals 1 or 3  | BODY TYPE (V5) should not equal 60-79.                                |
|          | AV145 | STRATUM (A23) equals 1   | at least one BODY TYPE (V5) should equal 01-49.                       |
|          | AV146 | STRATUM (A23) equals 2   | at least one BODY TYPE (V5) should equal 60-79.                       |
|          | AV149 | FIRST HARMFUL EVENT (A06) equals 01 and there is no BODY TYPE (V05) equal to 80-89             | at least one ROLLOVER TYPE (V30) must equal 10, 20-23, 28, 29, or 99. |
|          | AV230 | STRATUM (A23) equals 4 and at least one BODY TYPE (V5) equals 60-79                            | no INJURY SEVERITY (P9) should equal 1, 2, 3, or 4.                   |
|          | AV231 | STRATUM (A23) equals 4 and no<br>BODY TYPE (V5) equals 60-79                                   | no INJURY SEVERITY (P9) should equal 2, 3, or 4.                      |
| <b>K</b> | AV236 | SCHOOL BUS RELATED (A21) equals 1  | at least one BODY TYPE (V22) should equal 24 or 50.                   |
|          | PV001 | PERSON TYPE (P3) equals 1 and BODY TYPE (V5) equals 80-89                                      | SEATING POSITION (P4) must not equal 00, 12-53, or 99.                |
|          | PV002 | PERSON TYPE (P3) equals 2, or 9 and BODY TYPE (V5) equals 01-02, 04, 10, 30-32, 39, 41, 90, 91 | SEATING POSITION (P4) must not equal 50 or 51.                        |
|          | PV005 | PERSON TYPE (P3) equals 2 or 9, and BODY TYPE (V5) equals 80-89                                | SEATING POSITION (P4) must not equal 13-19, 22-53.                    |
|          | PV007 | PERSON TYPE (P3) equals 2 and<br>BODY TYPE (V5) equals 50-59                                   | SEATING POSITION (P4) must not equal 11-39, 50, 52, or 99.            |
|          | PV010 | PERSON TYPE (P3) equals 9 and<br>BODY TYPE (V5) equals 50-59                                   | SEATING POSITION (P4) must not equal 12-50, or 52.                    |
|          | PV011 | PERSON TYPE (P3) equals 1 and AGE (P7) is less than 08   | BODY TYPE (V5) must not equal 01-07, 09-60, 64-66, 78-79, or 93.      |

|          |       | IF  | THEN   |
|----------|-------|---|--|
|          | PV066 | RESTRAINT SYSTEM USE (P15) equals 1-3 or 6  | BODY TYPE (V5) must not equal 80-89 or 90.                                     |
|          | PV068 | RESTRAINT SYSTEM USE (P15) equals 5   | BODY TYPE (V5) should equal 80-90.   |
|          | PV101 | RESTRAINT TYPE (P16) equals 1   | BODY TYPE (V5) should equal 01-13, 20, or 49.                                  |
|          | PV125 | EJECTION (P6) equals 1, 2, or 7   | BODY TYPE (V5) must not equal 80-89, 90, or 91.                                |
|          | PV166 | SEATING POSITION (P4) equals 31-39  | BODY TYPE (V5) should not equal 01, 02, 03, 04, or 05.                         |
|          | PV171 | AIR BAG AVAILABILITY/<br>FUNCTION (P21) equals 1 or 2 and<br>BODY TYPE (V5) equals 20                         | VEHICLE MAKE (V3) should equals 06, 07, 09, 12, 14, 20, 21, 22, 35, 41, or 49. |
|          | PV172 | AIR BAG AVAILABILITY/<br>FUNCTION (P21) equals 1 or 2   | BODY TYPE (V5) must equal 01-39, 48, or 49.                                    |
|          | PV188 | (any) INJURY SEVERITY (P9) equals 1,2,3,4 or 5 and (any) BODY TYPE (V5) equals 60-79                          | STRATUM (A23) should equal 02.   |
|          | PV194 | AIR BAG AVAILABILITY/ FUNCTION (P21) equals 1 or 2 and BODY TYPE (V5) equals 14-19                            | VEHICLE MAKE (V3) should equal 02 or 12.                                       |
|          | PV195 | AIR BAG AVAILABILITY/ FUNCTION (P21) equals 1 or 2 and BODY TYPE (V5) equals 21                               | VEHICLE MAKE (V3) should equal 09, 12, or 20.                                  |
|          | PV196 | AIR BAG AVAILABILITY/<br>FUNCTION (P21) equals 1 or 2 and<br>BODY TYPE (V5) equals 14-19, 21-29,<br>48, or 49 | MODEL YEAR (V6) must be greater than 91.                                       |
|          | PV202 | AIR BAG AVAILABILITY/ FUNCTION (P21) equals 1 or 2 and BODY TYPE (V5) equals 31                               | VEHICLE MAKE (V3) should equal 07, 12, 20, or 49.                              |
| <b>F</b> | AV233 | INJURY SEVERITY (P9) equals 1 and at least one BODY TYPE (V23) equals 60-79                                   | STRATUM (A23) should not equal<br>4.   |

|       | IF  | THEN   |
|-------|---|--|
| VA102 | BODY TYPE (V5) equals 24 or 50  | SCHOOL BUS RELATED (A21) should equal 1.   |
| VP173 | BODY TYPE (V5) equals 40-45, 50-97  | AIR BAG AVAILABILITY/<br>FUNCTION (P21) should equal 0.                              |
| VP174 | UNLIKELY: AIR BAG AVAILABILITY/when MODEL YEAR (V6) is less then 70.                    | FUNCTION (P21) is equal to 1 or 2  |
| VP192 | SEATING POSITION (P4) equals 53 and BODY TYPE (V5) does not equal 01,06, 30-39          | EJECTION (P6) should equal 0.  |
| VP193 | RESTRAINT SYSTEM USE (P15) equals 1 and BODY TYPE (V05) does not equal 01-49, 79, or 99 | RESTRAINT TYPE (P16) must equal 2.   |
| VP207 | If BODY TYPE (V5) equals 80-91 and NUMBER OF OCCUPANTS (V10) is greater than 00         | EJECTION (P6) must equal 0.  |
| VP224 | BODY TYPE (V5) equals 80-90   | RESTRAINT SYSTEM USE (P15) must equal 0, 5, or 9.                                    |
| VP229 | BODY TYPE (V5) equals 50-97   | RESTRAINT type (P16) must not equal 1.   |
| VV003 | SPECIAL USE (V8) equals 01  | BODY TYPE (V5) must equal 02-09, 12, 20-29, or 49.                                   |
| VV006 | SPECIAL USE (V8) equals 02  | BODY TYPE (V5) must equal 14-16, 19, 20, 21, 24-25, 28-29, 45, 48-49, 50, 58-59.     |
| VV009 | BODY TYPE (V5) equals 80-89   | SPECIAL USE (V8) must not equal 01-03, 06, 07, or 10.                                |
| VV010 | SPECIAL USE (V8) equals 03  | BODY TYPE (V5) must equal 14-16, 19, 20, 21, 24-25, 28-29, 45, 48, 49, 50-59, or 99. |
| VV012 | BODY TYPE (V5) equals 01-05, 07-09  | NUMBER OF OCCUPANTS (V10) must not be greater than 15.                               |
| VV013 | BODY TYPE (V5) equals 06, 11, 14, or 15   | NUMBER OF OCCUPANTS (V10) must not be greater than 22.                               |
| VV015 | BODY TYPE (V5) equals 80-89   | NUMBER OF OCCUPANTS (V10) must not be greater than 5.                                |
| VV024 | JACKKNIFE (V14) equals 1  | BODY TYPE (V5) must equal 66.  |

| VV025   | IF SPECIAL USE (V8) equals 06                     | <b>THEN</b> BODY TYPE (V5) must equal 08, 11, 12, 14-16, 19, 20-21, 28-29, 40-41, 48-49, 60, 79, 97 or 99. |
|---------|---|--|
| VV030   | VEHICLE TRAILING (V13) equals 1                   | BODY TYPE (V5) should not equal 50-58, 80-89, 90, or 91.   |
| VV032   | BODY TYPE (V5) equals 01-05, 07-09, 97            | NUMBER OF OCCUPANTS (V10) should not be greater than 8.  |
| VV033   | BODY TYPE (V5) equals 12                          | NUMBER OF OCCUPANTS (V10) should not be greater than 15.   |
| VV034   | BODY TYPE (V5) equals 06, 14-15, 23, 42, 60-79    | NUMBER OF OCCUPANTS (V10) should not be greater than 12.   |
| VV036   | BODY TYPE (V5) equals 80-89, or 91                | NUMBER OF OCCUPANTS (V10) should not be greater than 2.  |
| VV037   | BODY TYPE (V5) equals 90                          | NUMBER OF OCCUPANTS (V10) should not be greater than 6.  |
| VV076   | BODY TYPE (V5) equals 66                          | VEHICLE TRAILING (V13) should not equal 0.   |
| VV084   | BODY TYPE (V5) equals 24 or 50                    | SPECIAL USE (V8) should equal 02.  |
| VV085   | BODY TYPE (V5) equals 25 or 58                    | SPECIAL USE (V8) must not equal 00 or 02.  |
| VV086   | BODY TYPE (V5) equals 59                          | SPECIAL USE (V8) must equal 99.  |
| VV101   | BODY TYPE (V5) equals 92                          | SPECIAL USE (V8) must equal 11.  |
| VV102 . | SPECIAL USE (V8) equals 11                        | BODY TYPE (V5) must equal 92.  |
| VV109   | BODY TYPE (V5) equals 50-64, 66-79                | CARRIER'S IDENTIFICATION<br>NUMBER (V31) should not equal<br>000000.                                       |
| VV110   | BODY TYPE (V5) is not equal to 50-64, 66-79 or 99 | CARRIER'S IDENTIFICATION<br>NUMBER (V31) must equal<br>000000.   |
| VV111   | BODY TYPE (V5) equals 80-89                       | ROLLOVER TYPE (V30) must equal 00.   |
| VV112   | BODY TYPE (V5) equals 93                          | SPECIAL USE (V8) must equal 12.  |
| VV113   | SPECIAL USE (V8) equals 12                        | BODY TYPE (V5) must equal 93.  |

|       | IF   | THEN  |
|-------|--|---|
| VV114 | SPECIAL USE (V8) equals 10   | BODY TYPE (V5) should equal 11.   |
| VV115 | VEHICLE TRAILING (V13) equals 4 or 9 and BODY TYPE (V05) equals 50, 59-64, 66-79 | NUMBER OF AXLES ON<br>VEHICLE, INCL TRAILER (V32)<br>must not equal 00. |
| VV116 | MOST HARMFUL EVENT (V20) equals 01 and BODY TYPE (V5) does not equal 80-89       | ROLLOVER TYPE (V30) must not equal 00.                                  |
| VV145 | CARGO BODY TYPE (V33) equals 01  | BODY TYPE (V5) must equal 50, 58, or 59.                                |
| VV153 | BODY TYPE (V5) equals 66 and VEHICLE TRAILING (V13) equals 0                     | HAZARDOUS MATERIALS<br>PLACARD NUMBER (V35) must<br>equal 00000.        |
| VV154 | BODY TYPE (V5) is not equal to 60, 64, 66-79 or 99                               | HAZARDOUS MATERIALS<br>RELEASE (V36) must equal 0.                      |
| VV155 | BODY TYPE (V5) equals 99   | HAZARDOUS MATERIALS<br>RELEASE (V36) must equal 9.                      |
| VV156 | BODY TYPE (V5) equals 66 and VEHICLE TRAILING (V13) equals 0                     | HAZARDOUS MATERIALS<br>RELEASE (V36) must equal 0.                      |
| VV157 | BODY TYPE (V5) equals 99   | HAZARDOUS MATERIALS<br>PLACARDED (V34) must equal 9.                    |
| VV160 | BODY TYPE (V5) equals 66 and VEHICLE TRAILING (V13) equals 0                     | HAZARDOUS MATERIALS<br>PLACARDED (V34) must equal 0.                    |
| VV161 | BODY TYPE (V5) equals 99   | HAZARDOUS MATERIALS<br>PLACARD NUMBER (V35) must<br>equal 99999.        |
| VV162 | BODY TYPE (V5) is not equal to 60,64,66-79 or 99                                 | HAZARDOUS MATERIALS<br>PLACARD NUMBER (V35) must<br>equal 00000.        |
| VV163 | BODY TYPE (V5) equals 99   | CARGO BODY TYPE (V33) must equal 99.                                    |
| VV164 | BODY TYPE (V5) is not equal to 50-64, 66-79 or 99                                | CARGO BODY TYPE (V33) must equal 00.                                    |
| VV165 | BODY TYPE (V5) is not equal to 50-64, 66-79 or 99                                | NUMBER OF AXLES ON<br>VEHICLE, INCL TRAILERS,<br>(V32) must equal 00.   |
| VV166 | BODY TYPE (V5) equals 99   | NUMBER OF AXLES ON VEHICLE, INCL TRAILERS, (V32) must equal 99.         |

|       | IF  | THEN  |
|-------|---|---|
| VV167 | BODY TYPE (V5) equals 99  | CARRIER'S IDENTIFICATION<br>NUMBER (V31) must equal<br>999999.                    |
| VV169 | BODY TYPE (V5) is not equal to 60, 64, 66-79 or 99                          | HAZARDOUS MATERIALS<br>PLACARDED (V34) must equal 0.                              |
| VV174 | VEHICLE TRAILING (V13) equals 0 and BODY TYPE (V5) equals                   | CARGO BODY TYPE (V33) must equal 98.  |
| VV185 | CARGO BODY TYPE (V33) equals 98 and BODY TYPE (V5) equals 66                | VEHICLE TRAILING (V13) should equal 0.  |
| VV219 | BODY TYPE (V5) equals 50, 59-64, 66-79, or 99                               | NUMBER OF AXLES ON<br>VEHICLE, INCL TRAILERS (V32)<br>must not equal 00.          |
| VV220 | BODY TYPE (V5) equals 50, 59-64, 66-79 or 99                                | CARGO BODY TYPE (V33) must not equal 00.  |
| VV221 | BODY TYPE (V5) equals 60-79 and SPECIAL USE (V8) equals 07                  | CARGO BODY TYPE (V33) must equal 98.  |
| VV223 | CARRIER'S IDENTIFICATION<br>NUMBER (V31) does not equal 000000<br>or 999999 | BODY TYPE (V5) must equal 50-64, 66-79 or 99.                                     |
| VV244 | BODY TYPE (V5) equals 66 or 78 and VEHICLE TRAILING (V13) equals 0          | NUMBER OF AXELS ON<br>VEHICLE, INCL. TRAILER (V32)<br>should equal 02, 03, or 99. |
| VV248 | BODY TYPE (V5) equals 50 or 59  | CARGO BODY TYPE (V33) must equal 01.  |
| VV249 | BODY TYPE (V5) equals 58  | CARGO BODY TYPE (V33) must equal 01 or 98.  |

## V06 Vehicle Model Year

## **Element Values**

Range: 40 through 96

Enter the last two digits of the model year

99 Unknown

## Remarks

Enter the last two digits of the model year for which the vehicle was manufactured. A vehicle manufactured as a 1996 model is encoded "96".

Enter "40" for all vehicles manufactured for the 1940 model year or before (i.e., 1939, 1938, etc.).

Enter "99" (Unknown) if the vehicle model year cannot be determined.

## **Consistency Check**

PV196

V06

1F

AIR BAG AVAILABILITY/
FUNCTION (P21) equals 1 or 2

and BODY TYPE (V5) equals 14-19, 21-29, 48, or 49

THEN

MODEL YEAR (V6) must be greater than 91.



VP174

UNLIKELY: AIR BAG AVAILABILITY/FUNCTION (P21) is equal to 1 or 2 when MODEL YEAR (V6) is less then 70.

# V07 Vehicle Identification Number

#### **Element Values**

#### Enter the entire VIN, left justify

0000 No VIN

9999 Unknown

#### Remarks

Code and left justify the entire VIN; leave "Blank" any column which does not have a VIN character. If part of the VIN is missing or not decipherable, leave the column any such character would ordinarily occupy "Blank".

Enter "9999999999999" (Unknown) if the entire VIN is unknown or missing. Use this element if the PAR does not provide the VIN.

Enter "0000000000000000" (No VIN) if the vehicle is a type which has no VIN (e.g., go-cart).

If the vehicle is a motor home or school bus, enter the vehicle chassis VIN; the secondary manufacturer's number must not be encoded. If the vehicle is manufactured by the Ford Motor Company and the VIN begins or ends with a script, "f", the "f" is not entered. Proceed to the next character, as in the example below.

VIN: f 3U62S100932 f ENTER: 3U62S100932

In addition, if any hyphens or periods are contained in the string of alphanumeric characters, ignore them as in the example below.

VIN: SM-E 3076421 ENTER: SME3076421

Vehicles manufactured after September 1980 conform to Federal Motor Vehicle Safety Standard 115. This standard requires that each VIN have 17 characters, not contain the letters "I", "O", or "Q", and pass a mathematical test.

# V08 Special Use

#### **Element Values**

- 00 No Special Use
- 01 Taxi
- 02 Vehicle Used As School Bus
- 03 Vehicle Used As Other Bus
- 04 Military
- 05 Police
- 06 Ambulance
- 07 Fire Truck and Car
- 10 Hearse
- 11 Farm Equipment
- 12 Construction Equipment
- 99 Unknown

#### Remarks

Enter "00" (No Special Use) unless one of the elements below specifically applies.

Enter "01" (Taxi) if the vehicle used during this trip (at the time of the accident) transports persons on a "fee-for-hire" basis.

Enter "02" (Vehicle Used As School Bus) if the motor vehicle satisfies the following criteria (i.e., V05, Body Type, need not equal "24" or "50"):

- externally identifiable to other traffic units as school/pupil transport vehicle; the vehicle may
  be equipped with flashing lights, may have a sway stop arm, and traffic may be required to
  stop for the vehicle when occupants enter or exit;
- operated, leased or owned by a public or private school-type institution;
- where the institution's students may range from pre-school through high school;
- whose occupants, if any, are associated with the institution; whose occupants, if any, are associated with the institution;
- the vehicle is in operation at the time of the accident to and from the school or on a school-sponsored activity or trip.

In most cases, your decision to use this code will be based on a reference to the vehicle as a school bus on the PAR. In this situation, assume the criteria are met unless it is otherwise stated on the PAR.

Enter "03" (Vehicle Used as Other Bus) when a motor vehicle is designed for transporting more than ten persons and does not satisfy the above "school bus" criteria.

For elements "04" (Military), "05" (Police), "06" (Ambulance), and "07" (Fire), special use means "in use" and not necessarily emergency use. External Identification to the normal driving public is the criterion.

Enter "04" (Military) if the vehicle is owned by any of the Armed Forces. These vehicles are presumed to be in special military use at all times and should be encoded as such regardless of body type.

**Enter "05" (Police)** if the vehicle is readily identifiable (lights or markings) and is owned by any local, county, state, or federal police agency. The vehicles are presumed to be in special police use at all times. Personal vehicles (not owned by the agency) which are used by officers or agents (e.g., undercover) are excluded.

Military police vehicles are entered "04" (Military).

Enter "06" (Ambulance) if the vehicle is readily identifiable (lights or markings) and its purpose is: (1) solely to provide ambulance service, or (2) dual, such as a hearse used for both funeral and emergency purposes. In the first instance it is presumed to be in special ambulance use at all times; in the second instance it is only entered when used for the latter purpose.

Military ambulances are entered "04" (Military).

**Enter "07" (Fire Truck and Car)** if the vehicle is owned by any government (typically local) or cooperative agency. This vehicle is presumed to be in special use at all times. For volunteer fire companies, fire-fighting apparatus and cars owned by the company or government qualify for this element. Privately owned vehicles, even if equipped with lights, do not qualify.

Military fire vehicles are entered "04" (Military).

Enter "10" (Hearse) if the vehicle is (at the time of the accident) being used to transport a dead body and is identified as a hearse.

Enter "11" (Farm Equipment) if Body Type, V05, equals "92" (e.g., balers, reapers, combines, etc.).

Enter "12" (Construction Equipment) if Body Type V05, equals "93" (e.g., bulldozers, steamrollers, forklifts, etc.).

## **Consistency Check**

|         |  | VUO  |
|---------|--|--|
| AV210   | IF<br>SCHOOL BUS RELATED (A21)<br>equals 1 | THEN at least one SPECIAL USE (V8) should equal 02.  |
| VA002   | SPECIAL USE (V8) for any vehicle equals 02 | SCHOOL BUS RELATED (A21) must equal 1.   |
| VV003   | SPECIAL USE (V8) equals 01                 | BODY TYPE (V5) must equal 02-09, 12, 20-29, or 49.   |
| VV006   | SPECIAL USE (V8) equals 02                 | BODY TYPE (V5) must equal 14-16, 19-21, 24, 25, 28, 29, 45, 48-49, 50, 58-59.                  |
| VV009   | BODY TYPE (V5) equals 80-89                | SPECIAL USE (V8) must not equal 01-03, 06, 07, or 10.  |
| VV010   | SPECIAL USE (V8) equals 03                 | BODY TYPE (V5) must equal 14-16, 19-21, 24, 25, 28, 29, 45, 48, 49, 50-59, or 99.              |
| VV025   | SPECIAL USE (V8) equals 06                 | BODY TYPE (V5) must equal 08, 11, 12, 14-16, 19, 20-21, 28-29, 40-41, 48-49, 60, 79, 97 or 99. |
| VV048   | UNLIKELY: SPECIAL USE (V8) is equ          | aal to 02, 03, 04, or 06.  |
| VV084   | BODY TYPE (V5) equals 24 or 50             | SPECIAL USE (V8) should equal 02.  |
| VV085 . | BODY TYPE (V5) equals 25 or 58             | SPECIAL USE (V8) must not equal 00 or 02.  |
| VV086   | BODY TYPE (V5) equals 59                   | SPECIAL USE (V8) must equal 99.  |
| VV087   | EMERGENCY USE (V9) equals 1 or 9           | SPECIAL USE (V8) must equal 04-07.   |
| VV101   | BODY TYPE (V5) equals 92                   | SPECIAL USE (V8) must equal 11.  |
| VV102   | SPECIAL USE (V8) equals 11                 | BODY TYPE (V5) must equal 92.  |
| VV112   | BODY TYPE (V5) equals 93                   | SPECIAL USE (V8) must equal 12.  |

**V08** 

|       | IF   | THEN   |
|-------|--|--|
| VV113 | SPECIAL USE (V8) equals 12                                 | BODY TYPE (V5) must equal 93.                        |
| VV114 | SPECIAL USE (V8) equals 10                                 | BODY TYPE (V5) should equal 11.                      |
| VV221 | BODY TYPE (V5) equals 60-79 and SPECIAL USE (V8) equals 07 | CARGO BODY TYPE (V33) must equal 98.                 |
| VV241 | SPECIAL USE (V8) equals 01                                 | NUMBER OF OCCUPANTS (V10) should be greater than 01. |

# V09 Emergency Use

## **Element Values**

0 No

1 Yes

9 Unknown

#### Remarks

If the vehicle is a police vehicle, ambulance, firetruck, or military vehicle [i.e., V08, Special Use, equals "04" (Military), "05" (Police), "06" (Ambulance), or "07" (Fire Truck and Car)], then see the narrative section of the PAR to determine if the vehicle was on an emergency run (i.e., "red lights flashing", "siren sounding", "on route to hospital", etc.) at the time of the accident.

Enter "0" (No) if the applicable vehicle was not on an emergency run, or this vehicle is not one of the applicable vehicles.

Enter "1" (Yes) if this vehicle is an applicable vehicle and it was on an emergency run.

Enter "9" (Unknown) if this vehicle is an applicable vehicle but the PAR is unclear as to whether it was on an emergency run.

## **Consistency Check**

| AV210 | IF PEDESTRIAN/BIKE ACCIDENT TYPE (A24) equals 0230 | THEN at least one EMERGENCY USE (V9) should equal 1. |
|-------|--|--|
| VV087 | EMERGENCY USE (V9) equals 1 or 9                   | SPECIAL USE (V8) must equal 04-07.                   |

V09

# **V10 Number Of Occupants**

## **Element Values**

Range 00 through 30

00-30 Enter actual number of Persons Coded for this vehicle

## Remarks

Enter "00" (Zero Persons Coded) when this vehicle was in-transport and unoccupied.

Enter "01" (One Occupant) if this vehicle is a "hit-and-run" vehicle, because it is assumed that only one occupant/driver was present. Additional Persons can be coded if reliable evidence exists that additional occupants were present.

BUS: Exclude all passengers in seat position 51 who were uninjured.

## **Consistency Check**

| V10 |
|-----|
|-----|

|       | IF   | THEN   |
|-------|--|--|
| VP045 | at least one NUMBER OF<br>OCCUPANTS (V10) equals 00 and<br>at least one PERSON TYPE (P3)<br>equals 5 | PEDESTRIAN/BIKE ACCIDENT TYPE (A24) should equal 0210 or 0320. |
| VP199 | NUMBER OF OCCUPANTS (V10) is greater than 00   | there must be only one occupant coded as the driver (P3=1).    |
| VP207 | BODY TYPE (V5) equals 80-91 and<br>NUMBER OF OCCUPANTS (V10)<br>is greater than 00                   | EJECTION (P6) must equal 0.                                    |
| VV012 | BODY TYPE (V5) equals 01-05, 07-09   | NUMBER OF OCCUPANTS (V10) must not be greater than 15.         |
| VV013 | BODY TYPE (V5) equals 06, 11, 14, or 15  | NUMBER OF OCCUPANTS (V10) must not be greater than 22.         |
| VV015 | BODY TYPE (V5) equals 80-89  | NUMBER OF OCCUPANTS (V10) must not be greater than 5.          |

|       | IF   | THEN   |
|-------|--|--|
| VV032 | BODY TYPE (V5) equals 01-05, 07-09, 97         | NUMBER OF OCCUPANTS (V10) should not be greater than 8.  |
| VV033 | BODY TYPE (V5) equals 12                       | NUMBER OF OCCUPANTS (V10) should not be greater than 15. |
| VV034 | BODY TYPE (V5) equals 06, 14-15, 23, 42, 60-79 | NUMBER OF OCCUPANTS (V10) should not be greater than 12. |
| VV036 | BODY TYPE (V5) equals 80-89, or 91             | NUMBER OF OCCUPANTS (V10) should not be greater than 2.  |
| VV037 | BODY TYPE (V5) equals 90                       | NUMBER OF OCCUPANTS (V10) should not be greater than 6.  |
| VV192 | NUMBER OF OCCUPANTS (V10) equals 00            | DRIVER PRESENCE (D1) must equal 0.                       |
| VV196 | DRIVER DISTRACTED BY (D7) equals 01            | NUMBER OF OCCUPANTS (V10) must be greater than 01.       |
| VV207 | NUMBER OF OCCUPANTS (V10) equals 00            | VIOLATIONS CHARGED (D2) must equal 00.                   |
| VV208 | NUMBER OF OCCUPANTS (V10) equals 00            | DRIVER'S VISION OBSCURED BY (D4) must equal 00.          |
| VV209 | NUMBER OF OCCUPANTS (V10) equals 00            | DRIVER MANEUVERED TO AVOID (D6) must equal 00.           |
| VV210 | NUMBER OF OCCUPANTS (V10) equals 00            | DRIVER DISTRACTED BY (D7) must equal 00.                 |
| VV216 | NUMBER OF OCCUPANTS (V10) equals 00            | DRIVER'S ZIP CODE (D8) must equal 00000.                 |
| VV241 | SPECIAL USE (V8) equals 01                     | NUMBER OF OCCUPANTS (V10) should be greater than 01.     |

# V11 Travel Speed

## **Element Values**

Range 00 through 97,99

Enter the nearest mph

(Note: 000 means less than 0.5 mph)

00 Stopped Vehicle

97 Ninety-Seven MPH Or Greater

99 Unknown

#### Remarks

Enter the travel speed for this vehicle; do not enter the "Speed Limit". Do not use estimates by drivers or witnesses reported in the "narrative" section of the PAR.

Enter the nearest kph, or if the travel speed is reported as a range, enter the average. For example:

Reported Speed:

40.2 mph

40.5 mph

45-50 mph

Enter:

"40"

"41"

"48"

Enter "00" (00 mph) if this vehicle is stopped or traveling less than 0.5 mph.

Enter "97" (Ninety-Seven MPH or Greater) if this vehicle's speed is reported as equal to or exceeding 96.5 mph.

Enter "99" (Unknown) if the estimated travel speed is unknown or not provided on the PAR.

# **Consistency Check**

V11

|       | IF  | THEN   |
|-------|---|--|
| AV011 | FIRST HARMFUL EVENT (A6) is not equal to 02, 06, 10, 21, 22, 27, 28   | there should be at least one vehicle with TRAVEL SPEED (V11) of 01-97, 99.           |
| AV012 | INTERSTATE HIGHWAY (A8) equals 1  | TRAVEL SPEED (V11) should not equal 01-40.   |
| AV019 | NUMBER OF MOTOR VEHICLES (A3) is greater than 01  | there should be at least one vehicle with TRAVEL SPEED (V11) of 01-97, 99, or blank. |
| AV213 | NUMBER OF MOTOR VEHICLES<br>(A3) equals 02 and MANNER OF<br>COLLISION (A7) equals 2 and<br>TRAVEL SPEED (V11) is greater<br>than 00 | VEHICLE ROLE (V22) must equal 1 or 3.  |
| VV008 | JACKKNIFE (V14) equals 1  | TRAVEL SPEED (V11) must not equal 00.  |
| VV027 | TRAVEL SPEED (V11) equals 00  | MOVEMENT PRIOR TO CRITICAL EVENT (V21) must equal 04, 06, 07, 08, 18, 98, or 99.     |
| VV031 | TRAVEL SPEED (V11) equals 00  | VEHICLE ROLE (V22) should not equal 1.   |
| VV051 | ACCIDENT TYPE (V23) equals 21, 22, or 23  | TRAVEL SPEED (V11) must equal 00.  |
| VV118 | MOVEMENT PRIOR TO<br>CRITICAL EVENT (V21) equals 04<br>or 06  | TRAVEL SPEED (V11) should equal 00.  |
| VV177 | INITIAL POINT OF IMPACT (V24) equals 01 and TRAVEL SPEED (V11) is greater than 00   | VEHICLE ROLE (V22) should not equal 2.   |

# **V12 Vehicle Contributing Factors**

#### 00 None 01 Tires 02 Brake System 03 Steering System - Tie Rod, Kingpin, Ball Joint, Etc. Suspension - Springs, Shock Absorbers, MacPherson Struts, Control Arms, Etc. 04 Power Train - Universal Joint, Drive Shaft, Transmission, Etc. 05 06 **Exhaust System** 07 Headlights 08 Signal Lights Other Lights 09 10 Wipers 11 Wheels

V12 Vehicle Contributing Factors • 169

Mirrors

Body, Doors

Trailer Hitch

Driver Seating & Control

Hit-And-Run Vehicle

Vehicle Contributing Factors - No Details

Other Vehicle Contributing Factors

Unknown If Contributing Factors

12 13

14

15

50

97

98

**Element Values** 

#### Remarks



Vehicle Contributing Factors are mechanical flaws that may have contributed to the cause of an accident. These factors can appear anywhere on the PAR--in the narrative section, in the space for violations, in a column entitled "Contributing Factors" or "Vehicle Defects", etc. It is not necessary that the PAR indicate this "factor" as a cause of the accident.



If more than one *factor* is indicated on the PAR, enter the code for the element with the lowest numerical value [e.g., "02" (Brake System) would be entered if both brake system and steering system "factors" were indicated].

Enter "00" (None) if no vehicle defect or factor was indicated by the investigating officer.

**Element "01" (Tires)** includes any defect of a tire. If the contributing factor is of the wheel (e.g. a lug nut comes off), use code "11" (wheels).

Element "02" (Brake System) includes parking brakes.

Element "05" [Power Train (Universal Joint, Drive Shaft, Transmission, Etc.)] includes engine and differential.

Element "06" (Exhaust System) includes exhaust manifold(s), headers, muffler, catalytic converter, tailpipe, etc.

Element "11" (Wheels) includes loss of lug nuts.

Element "14" (Body, Doors) includes trunk, hood, tailgate, rear doors of cargo vans, etc.

**Element "15" (Trailer Hitch)** applies to a defective trailer hitch or an improper trailer hitch. If the PAR cites this element, encode it.

Enter "50" (Hit and Run Vehicle) for a hit-and-run vehicle unless the PAR indicates the presence of a "defect".

Enter "97" (Vehicle Contributing Factors - No Details) if a vehicle "factor" or "defect" is indicated on the PAR but no information is given concerning the nature of the "factor".

Enter "98" (Other Vehicle Contributing Factors) if a defect is cited but is not listed above.

**Enter "99" (Unknown If Contributing Factors)** only if the PAR specifically indicates an "unknown defect" or "unknown contributing factor".

## **Consistency Check**

| V | 1 | 2 |
|---|---|---|
|   |   |   |

|       | IF   | THEN  |
|-------|--|---|
| VV073 | VEHICLE CONTRIBUTING FACTORS (V12) equals 50   | HIT-AND-RUN (V2) must equal 1.                        |
| VV083 | HIT-AND-RUN (V2) equals 1                      | VEHICLE CONTRIBUTING FACTORS (V12) must not equal 99. |
| VV124 | CRITICAL EVENT (V26) equals 010, 020, 030, 040 | VEHICLE CONTRIBUTING FACTORS (V12) must not equal 00. |
| VV194 | VEHICLE CONTRIBUTING FACTORS (V12) equals 50   | DRIVER PRESENCE (D1) must equal 2.                    |

# V13 Vehicle Trailing

#### **Element Values**

- 0 No
- 1 Yes, One Trailing Unit
- 2 Yes, Two Trailing Units
- 3 Yes, Three Or More Trailing Units
- 4 Yes, Number Of Trailing Units Unknown
- 9 Unknown

#### **Remarks**

For the purposes of this variable, "vehicle" means the power unit. All articulated vehicles (as defined on V05, Body Type) have at least one trailing unit.

A trailing unit includes horse trailers, fifth wheel trailers, travel trailers, camper trailers, boat trailers, truck trailers (semi, full, log, tanker, etc.), towed motor vehicles, or any other trailer.

Enter "0" (No) when a trailing unit is not being towed by this vehicle.

Enter "1" (Yes, One Trailing Unit), "2" (Yes, Two Trailing Units), or "3" (Yes, Three Or More Trailing Units) when a known number of trailing units are being towed by this vehicle.

Enter "4" (Yes, Number of Trailing Units Unknown) when this vehicle was towing a trailing unit, but it is unknown exactly how many trailing units were being towed.

Enter "9" (Unknown) when it is uncertain whether this vehicle was towing a trailing unit.

## **Consistency Check**

| stericy Ci | HECK   | V13  |
|------------|--|--|
| AV106      | IF FIRST HARMFUL EVENT (A6) equals 05  | THEN for at least one vehicle, VEHICLE TRAILING (V13) must not equal 0.  |
| PV006      | SEATING POSITION (P4) equals 52  | VEHICLE TRAILING (V13) must not equal 0.                                 |
| VV005      | JACKKNIFE (V14) equals 1   | VEHICLE TRAILING (V13) must not equal 0, 9.                              |
| VV030      | VEHICLE TRAILING (V13) equals 1  | BODY TYPE (V5) should not equal 50-58, 80-89, 90, or 91.                 |
| VV076      | BODY TYPE (V5) equals 66   | VEHICLE TRAILING (V13) should not equal 0.                               |
| VV091      | MOST HARMFUL EVENT (V20) equals 05   | VEHICLE TRAILING (V13) must not equal 0.                                 |
| VV115      | VEHICLE TRAILING (V13) equals<br>4 or 9 and BODY TYPE (V05)<br>equals 50, 59-64, 66-79 | NUMBER OF AXLES ON<br>VEHICLE, INCL TRAILERS (V32)<br>must not equal 00. |
| VV153      | BODY TYPE (V5) equals 66 and VEHICLE TRAILING (V13) equals 0                           | HAZARDOUS MATERIALS<br>PLACARD NUMBER (V35) must<br>equal 00000.         |
| VV156      | BODY TYPE (V5) equals 66 and VEHICLE TRAILING (V13) equals 0                           | HAZARDOUS MATERIALS<br>RELEASE (V36) must equal 0.                       |
| VV160      | BODY TYPE (V5) equals 66 and VEHICLE TRAILING (V13) equals 0                           | HAZARDOUS MATERIALS<br>PLACARDED (V34) must equal 0.                     |
| VV174      | VEHICLE TRAILING (V13) equals 0 and BODY TYPE (V5) equals 66                           | CARGO BODY TYPE (V33) must equal 98.                                     |
| VV185      | CARGO BODY TYPE (V33) equals 98 and BODY TYPE (V5) equals 66                           | VEHICLE TRAILING (V13) should equal 0.                                   |
| VV244      | BODY TYPE (V5) equals 66 or 78   | NUMBER OF AXLES ON VEHICLE, INCL. TRAILER (V32) should equal             |

INCL. TRAILER (V32) should equal

02, 03, or 99.

equals 0

and VEHICLE TRAILING (V13)

## V14 Jackknife

#### **Element Values**

- 0 No Jackknife Noted On PAR
- 1 Jackknife Occurred

#### Remarks

Jackknife can occur at any time during the accident sequence. The phenomenon called "jackknife" is restricted to truck-tractor vehicles.

Uncontrolled articulation (jackknife) of units is defined as:

- the pulled unit is not tracking (following directly behind) the power unit, and
- the driver of the vehicle did not initiate the "non-tracking" situation.

A turn is an example of a controlled articulation which is not coded in this variable.

Enter "0" (No Jackknife Noted on PAR) for all vehicles encoded in variable V13, Vehicle Trailing, as No or Unknown (elements "0" and "9" respectively). In addition, use this element whenever no uncontrolled articulation was reported between a truck-tractor and trailer [V13 equals "1" through "4" (Yes, Trailing Units)]

Enter "1" (Jackknife Occurred) when any uncontrolled articulation between a truck-tractor and trailer occurs. It makes no difference at what point in time during the accident sequence that the jackknife situation occurred.

# **Consistency Check**

V14

|       | IF                                 | THEN  |
|-------|------------------------------------|---|
| AV106 | FIRST HARMFUL EVENT (A6) equals 05 | for at least one vehicle, JACKKNIFE (V14) must equal 1.                 |
| VV005 | JACKKNIFE (V14) equals 1           | VEHICLE TRAILING (V13) must not equal 0, 9.                             |
| VV008 | JACKKNIFE (V14) equals 1           | TRAVEL SPEED (V11) must not equal 00.                                   |
| VV024 | JACKKNIFE (V14) equals 1           | BODY TYPE (V5) must equal 66.   |
| VV026 | JACKKNIFE (V14) equals 1           | MOVEMENT PRIOR TO CRITICAL EVENT (V21) must not equal 03-04, 06-08, 13. |
| VV092 | MOST HARMFUL EVENT (V20) equals 05 | JACKKNIFE (V14) must equal 1.   |
| VV193 | JACKKNIFE (V14) equals 1           | DRIVER PRESENCE (D1) must not equal 0.                                  |

## V16 Fire Occurrence

## **Element Values**

- 0 No Fire Noted On PAR
- 1 Fire Occurred In Vehicle

#### Remarks

Enter "0" (No Fire Noted On PAR) whenever no mention is made on the PAR of a fire to this vehicle. It also includes vehicles with smoke damage, but which sustained no fire.

Enter "1" (Fire Occurred In Vehicle) whenever the PAR indicates that this vehicle sustained fire damage. For the purposes of this variable, "vehicle" is defined to mean the power unit plus any and all trailing units associated with the power unit.

## **Consistency Check**

|       |                                    | V16  |
|-------|------------------------------------|--|
|       | IF                                 | THEN   |
| AV009 | FIRST HARMFUL EVENT (A6) equals 02 | at least one vehicle should have FIRE OCCURRENCE (V16) equal to 1. |
| VV021 | MOST HARMFUL EVENT (V20) equals 02 | FIRE OCCURRENCE (V16) for this vehicle should equal 1.             |

# V18 Damage Severity

#### **Element Values**

- 0 None
- 1 Minor
- 2 Functional (Moderate)
- 3 Disabling (Severe)
- 9 Unknown

#### Remarks

Enter "0" (None) if no damage is indicated on the PAR for this vehicle.

Enter "1" (Minor) if this element value is specifically indicated on the PAR. Examples of minor damage include:

- dented or bent fenders,
- bumpers,
- grills,
- body panels,
- destroyed hubcaps,
- etc.

Enter "2" [Functional (Moderate)] when specifically indicated on the PAR or when evidence indicates that the damage was other than disabling. For example:

- doors, windows, hood, and trunk lids which will not operate properly;
- broken glass which obscures vision;
- damage which would prevent the motor vehicle from passing an official motor vehicle inspection;
- tire damage even though the tire may be changed at the scene;
- bumpers which are loose;
- damage which can be remedied temporarily at the scene without special tools or parts other than tires;
- tire disablement without other damage, even if no spare tire is available;
- headlamp or taillight damage which would make night driving hazardous but would not affect daytime driving; and
- damage to turn signals, horn, or windshield wipers which makes them inoperative.

Enter "3" [Disabling (Severe)] when specifically indicated on the PAR or when evidence indicates that the damage precludes the departure of this vehicle from the scene of the accident in its usual operating manner by daylight after simple repairs. Included in this element are vehicles which can be driven but which would be further damaged in the process.

Enter "9" (Unknown) when the PAR specifically indicates that the damage severity is unknown or when the information is inadequate to determine the correct choice.

### **Consistency Check**

|       |  | V 10   |
|-------|--|--|
| VV059 | IF DAMAGE SEVERITY (V18) equals 3  | THEN MANNER OF LEAVING SCENE (V19) should equal 2. |
| VV060 | DAMAGE SEVERITY (V18) is equal to 3                                      | MANNER OF LEAVING SCENE (V19) should not equal 1.  |
| VV061 | MANNER OF LEAVING SCENE (V19) equals 2                                   | DAMAGE SEVERITY (V18) must not equal 0 or 1.       |
| VV088 | DAMAGE SEVERITY (V18) equals 0   | DAMAGE AREAS (V25) must equal 00000.               |
| VV089 | DAMAGE SEVERITY (V18) equals 3   | MANNER OF LEAVING SCENE (V19) must not equal 3.    |
| VV090 | MANNER OF LEAVING SCENE (V19) equals 3                                   | DAMAGE SEVERITY (V18) must not equal 3.            |
| VV222 | DAMAGE AREAS (V25) equals 00000 and VEHICLE ROLE (V22) is not equal to 0 | DAMAGE SEVERITY (V18) must equal 0.                |
| VV246 | MANNER OF LEAVING SCENE (V19) equals 3                                   | DAMAGE SEVERITY (V18) should not equal 2 or 9.     |

V18

# V19 Manner of Leaving Scene

#### **Element Values**

- 1 Driven Away
- 2 Towed Due To Damage
- 3 Towed Not Due To Damage
- 4 Abandoned
- 9 Unknown If Towed

#### Remarks

This variable measures the disposition of the vehicle, or power unit of an articulated combination, at the accident scene.

Enter "1" (Driven Away) when the vehicle is not towed from the scene and has not been abandoned.

Enter "2" (Towed Due To Damage) for any towing which is due to disabling damage caused by this accident which prohibits vehicle movement under its own power. For example, if a vehicle is pushed home by hand or by another vehicle after the accident because it was not drivable, then enter this code.

Element "2" includes any towing, the reason for which is unknown. In other words, if a vehicle is reported on the PAR as towed but it cannot be determined whether it was due to damage or for other reasons, then the **default assumption** is that this vehicle was **towed due to damage**.

Enter "3" (Towed Not Due To Damage) when the vehicle has been towed but the towing results from other than damage (e.g., mired vehicles, driver arrested, injured driver, etc.).

Enter "4" (Abandoned) when specifically indicated on the PAR or when the preponderance of the information available indicates that the vehicle remained at the scene. Do not use this element value if the vehicle was left at the scene because this location was the vehicle's destination at the time of the accident.

## **Consistency Check**

|       |   | VIÐ  |
|-------|---|--|
| AV099 | IF<br>STRATUM (A23) equals 1  | THEN at least one MANNER OF LEAVING SCENE (V19) should equal 2 or 3. |
| AV100 | STRATUM (A23) equals 3 or 4 and BODY TYPE (V5) equals 01-49   | MANNER OF LEAVING SCENE (V19) should not equal 2 or 3.               |
| VP143 | no MANNER OF LEAVING<br>SCENE (V19) equals 2 and no<br>INJURY SEVERITY (P9) equals 2,<br>3, 4, or 5 | STRATUM (A23) should equal 4.  |
| VP208 | HIT-AND-RUN (V2) equals 1 and MANNER OF LEAVING SCENE (V19) equals 1                                | EJECTION (P6) must equal 0.  |
| VV058 | DAMAGE AREAS (V25) equals 70000   | MANNER OF LEAVING SCENE (V19) should equal 2 or 3.                   |
| VV059 | DAMAGE SEVERITY (V18) equals 3  | MANNER OF LEAVING SCENE (V19) should equal 2.                        |
| VV060 | DAMAGE SEVERITY (V18) is equal to 3   | MANNER OF LEAVING SCENE (V19) should not equal 1.                    |
| VV061 | MANNER OF LEAVING SCENE (V19) equals 2  | DAMAGE SEVERITY (V18) must not equal 0 or 1.                         |
| VV062 | MOST HARMFUL EVENT (V20) equals 21, 22, or 27   | MANNER OF LEAVING SCENE (V19) should not equal 2.                    |
| VV074 | MANNER OF LEAVING SCENE (V19) equals 2  | DAMAGE AREAS (V25) should be greater than 00000.                     |
| VV080 | DAMAGE AREAS (V25) equals<br>00000 and MOST HARMFUL<br>EVENT (V20) does not equal 01-10             | MANNER OF LEAVING SCENE (V19) should not equal 2.                    |
| VV089 | DAMAGE SEVERITY (V18) equals 3  | MANNER OF LEAVING SCENE (V19) must not equal 3.                      |
| VV090 | MANNER OF LEAVING SCENE (V19) equals 3  | DAMAGE SEVERITY (V18) must not equal 3.                              |

V19

IF



VV246

MANNER OF LEAVING SCENE (V19) equals 3

#### THEN

DAMAGE SEVERITY (V18) should not equal 2 or 9.

# **V20 Most Harmful Event**

| Element     | : Values   |
|-------------|--|
| Non-Collisi | on   |
| 01          | Rollover/Overturn  |
| 02          | Fire/Explosion   |
| 03          | Immersion  |
| 05          | Jackknife  |
| 06          | Non-Collision Injury (Injured In Or Fell From Vehicle)         |
| 08          | Other Non-Collision  |
| 09          | Non-Collision - No Details                                     |
| 10          | Thrown Or Falling Object                                       |
| Collision V | Vith Object Not Fixed  |
| 21          | Pedestrian   |
| 22          | Cycle Or Cyclist (Pedalcycle/Pedalcyclist)                     |
| 23          | Railway train  |
| 24          | Animal   |
| 25          | Motor Vehicle In Transport                                     |
| 26          | Parked Motor Vehicle (Or Other Motor Vehicle Not In Transport) |
| 27          | Other Type Non-Motorist  |
| 28          | Other Object Not Fixed   |
| 29          | Object Not Fixed - No Details                                  |
| Collision w | rith Fixed Object  |
| 31          | Ground   |
| 32          | Building   |
| 33          | Impact Attenuator/Crash Cushion                                |
| 34          | Bridge Structure   |
| 35          | Guardrail  |
| 36          | Concrete Traffic Barrier Or Other Longitudinal Barrier Type    |
| 37          | Sign Post, Utility Pole, Or Other Support                      |
| 38          | Culvert Or Ditch   |

- 39 Curb
- 40 Embankment
- 41 Fence
- 42 Wall
- 43 Fire Hydrant
- 44 Shrubbery Or Bush
- 45 Tree
- 46 Boulder
- 50 Pavement Surface Irregularity (Ruts, Potholes, Grates, Plates, etc.)
- 58 Other Fixed Object
- 59 Fixed Object No Details
- 99 Unknown

#### Remarks

Every motor vehicle traffic accident consists of a series of events. For analytical purposes, researchers will focus on the single most harmful event for a vehicle. When a vehicle is involved in multiple harmful events, select the event which, for this vehicle, produced the most severe injury or property damage.

Enter "01" (Rollover/Overturn) when a motor vehicle rotates (rollover) at least one quarter turn in any non-horizontal direction. Use this code also when an uncontrolled motorcycle first contacts the ground or pavement surface. All motor vehicles may rollover/overturn, except for motorcycles, which can overturn but not rollover. Vehicles which first impact pedestrians, non-motorists, vehicles, animals, trains, or other objects, receive codes "21" through "59".

Enter "05" (Jackknife) whenever there is sufficient rotation (articulation) between a tractor/trailer combination such that they contact each other. Jackknife is restricted to truck-tractor combinations.

Enter "06" [Non-Collision Injury (Injured In Or Fell From Vehicle)] when a person falls from or is injured inside the vehicle. This includes persons jumping or stepping from moving vehicles, persons falling from pickup beds, and persons colliding with the interior of a vehicle during a sudden stop.

Enter "08" (Other Non-Collision) when a vehicle sets an object in motion that strikes or is struck by a vehicle before the object stabilizes. Examples include dislodged cargo, spewed gravel, etc. It may be used in other situations as well.

Enter "10" (Thrown or Falling Object) when any object (1) is thrown (intentionally or unintentionally) and impacts an in-transport vehicle, or (2) falls onto, into, or in the path of an in-transport motor vehicle. However, objects set in motion by an in-transport vehicle are to be coded "08" (Other Non-Collision). If a tree limb falls from a tree and is contacted by a car, enter this code. If a tree limb falls from a tree trimming truck and is struck, enter code "08". If a child maliciously throws a tree limb off of an overpass into traffic below, enter this code.

Enter "21" (Pedestrian) when any person who was involved in the event is on a trafficway or on a sidewalk or path contiguous with a trafficway, and who is not in or on a nonmotorist conveyance. A nonmotorist conveyance is defined as any human-powered device by which a nonmotorist may move, or by which a pedestrian or nonmotorist may move another nonmotorist, other than by pedaling. A nonmotorist conveyance includes the following: baby carriage, coaster wagon, ice skates, roller skates, push cart, scooter, skate board, skis, sled, wheelchair, rickshaw, etc. Excluded are pedalcyclists.

Enter "22" [Cycle Or Cyclist (Pedalcycle/Pedalcyclist)] when any occupant of a pedalcycle was involved in the most harmful event.

Enter "25" (Motor Vehicle In-Transport) when the impact occurred between two motor vehicles in-transport.

A vehicle parked in a mid-block bus stop, fire hydrant, etc., should be considered as in-transport if the vehicle should not be parked in the location (i.e., parked buses, fire trucks, etc., are considered not in-transport while a passenger car, motorcycle, etc., are considered in-transport).

Enter "26" [Parked Motor Vehicle (Or Other Motor Vehicle Not In Transport)] when the impact occurred between a motor vehicle in-transport and a motor vehicle neither on a roadway nor in motion.

Enter "27" (Other Type Non-motorist) when the person impacted is not a pedestrian or a pedalcyclist. [NOTE: If the event occurs with a motor vehicle not in-transport which contains a nonmotorist (e.g., Occupant of vehicle not in-transport), enter "26" (Parked Motor Vehicle) above.]

Enter "28" (Other Object Not Fixed) when the impact is between a motor vehicle in-transport and any other object that is moving or not anchored prior to the accident. Included in this category is a collision between a motor vehicle in-transport, which leaves its roadway, and a motor vehicle in motion off any trafficway. For example, a vehicle loses control and contacts a snowmobile in motion off the trafficway.

**Element "31" (Ground)** includes pavement, is not to be entered when the first event is a "Rollover/Overturn" ("01").

Enter "33" (Impact Attenuator/Crash Cushion) when the most harmful event is with any device described on the PAR as an impact attenuator or crash cushion.

Enter "34" (Bridge Structure) when the contact was with any part of a bridge structure. This includes:

- support structure,
- overpass structure (not "front face"),
- bridge rail,
- bridge-pier abutment, and
- parapet end.

For contact to the "front face" of an overpass structure (e.g., the top of the cargo area of a truck strikes the front of a bridge with a low clearance) enter "58" (Other Fixed Object). Included within the meaning of bridge structure are supports for railway underpasses, including those for mass transit type trains.

If the impact was with an impact attenuator protecting a bridge support, then enter "33" (Impact Attenuator/Crash Cushion). Contact with the underside of the bridge deck is coded "58" (Other Fixed Object).

Enter "35" (Guardrail) whenever the impact occurs with any longitudinal barrier described on the PAR as a guardrail, regardless of its location.

Enter "36" [Concrete Traffic Barrier (or Other Longitudinal Barrier Type)] whenever the impact described on the PAR occurs with a concrete barrier (commonly referred to as a GM or New Jersey barrier), regardless of its location. Enter this value for temporary (e.g., construction sites) and permanent installations. Concrete traffic barriers located on a bridge with a closed median are not considered bridge rails (Element "34"). Concrete traffic barriers located on the outer road edges of a bridge are considered bridge rails (Element "34").

#### Enter "37" (Sign Post, Utility Pole, or Other Support) when the impact occurs to:

- a support for a highway or traffic sign,
- anything that supports a sign under which vehicles travel,
- a street light,
- a support for utility lines,
- a traffic signal pole,
- any non-highway or non-traffic sign (e.g., a private sign),
- a mail box post,
- a delineator post, or
- any other type post, pole, or support.

This value should **not** be used when the impact was with any supporting structure of a bridge (see element "34" above).

Enter "38" (Culvert or Ditch) when the impact occurs with a culvert or ditch. A culvert is a man-made structure that allows passage over a drainage area and is that part of the structure which is intended to channel flow through the structure and maintain the stability/integrity of the road bed. If the structure has a portion above the road surface which is of sufficient height to engage above the wheels of an errant passenger vehicle and redirect it, that part of the structure is considered a bridge rail (element "34"). A ditch is a man made structure for drainage purposes. A ditch ends where a culvert begins and resumes on the opposite side of the culvert.

Enter "45" (Tree) when the impact is with a tree. This includes impacts with overhanging branches. Do not use this code if the tree is not standing. Trees which have fallen and are struck should be coded using "28" (Other Object Not Fixed) for small trees or "58" (Other Fixed Object) for large trees.

**Element "46" (Boulder)** is used when an in-transport motor vehicle contacts any large (not defined but at least larger than gravel) stationary rock.

Enter "58" (Other Fixed Object) when the PAR describes the impact to any fixed object which is anchored and not moving and not specifically mentioned above. Collisions which may be classified using this code include (but are not limited to):

- vehicles which sustain undercarriage damage by straddling the pavement and shoulder and impacting a prominent pavement lip, or
- free falls or vaults from the road surface to the ground or pavement without being listed on the PAR as rolling over or overturning.

If the PAR indicates the impact was in a median, determine if the impact was with a longitudinal barrier (guardrail, concrete, or other). If a barrier was contacted, enter "35" (Guardrail) or "36" (Concrete Traffic Barrier or Other Longitudinal Barrier Type) based on the PAR description. If no longitudinal barrier was contacted but contact occurred to a nonraised paved surface, gravel, or grass, then enter "31" (Ground). If the PAR indicates that the harmful event is with a raised, paved area (concrete or bituminous), then enter "39" (Curb). This is true even if a barrier is anchored in the raised, paved area. If the median is depressed, select the element which best fits the PAR's impact description and enter "31" (Ground), "40" (Embankment), "44" (Shrubbery Or Bush), "45" (Tree), "46" (Boulder), "58" (Other Fixed Object), etc. whichever is most appropriate.

Tunnels are handled according to the following rules. If the PAR describes the impact as external (i.e., the impact is to the hill or mountainside), enter "Embankment" (element "40"). If the impact is to the tunnel entrance (i.e., not protected by guardrails or bridge rails that lead into a tunnel or impact attenuators), then enter "58" (Other Fixed Object). Enter "42" (Wall) if the plane of the tunnel is broad or wide enough that the tunnel entrance functions as a wall and contact is made

with this wall. External impacts to impact attenuators are entered "33" (Impact Attenuator/Crash Cushion).

Internal or external impacts to: [a] median barriers should be entered "35" (Guardrail) or "36" (Concrete Traffic Barrier Or Other Longitudinal Barrier Type); [b] curbs (raised, paved medians) or walks should be entered "39" (Curb); or [c] the tunnel wall should be entered "42" (Wall). If contact is made with a bridge that leads into a tunnel, then enter "34" [Bridge Structure].

Enter "99" (Unknown) when it is not possible to determine which event produced the most severe injury or property damage for this vehicle or its occupants.

## **Consistency Check**

| -     |  | V20  |
|-------|--|--|
|       | IF   | THEN   |
| AV069 | FIRST HARMFUL EVENT (A6) equals 01-09 and MOST HARMFUL EVENT (V20) equals 01-09                | INITIAL POINT OF IMPACT (V24) must equal 00.                                     |
| AV185 | FIRST HARMFUL EVENT (A6) equals 02-03, 06-10 and MOST HARMFUL EVENT (V20) equals 02-03, 06-10  | CRITICAL EVENT (V26) should equal 000 or 994.                                    |
| AV214 | If FIRST HARMFUL EVENT (A6) or MOST HARMFUL EVENT (V20) equals 38                              | ROLLOVER TYPE (V30) should equal 00 or 22.                                       |
| AV185 | FIRST HARMFUL EVENT (A6) equals 02-03, 06-10 and MOST HARMFUL EVENT (V20) equals 02- 03, 06-10 | CRITICAL EVENT (V26) should equal 000 or 994.                                    |
| PV103 | EJECTION (P6) equals 1, 2, or 7  | this person's vehicle's MOST<br>HARMFUL EVENT (V20) must not<br>equal 06.        |
| VA001 | MOST HARMFUL EVENT (V20) equals 25   | NUMBER OF MOTOR VEHICLES (A3) must be greater than 01.                           |
| VA003 | MOST HARMFUL EVENT (V20) equals 23   | INTERSTATE HIGHWAY (A8) should not equal 1.                                      |
| VA004 | MOST HARMFUL EVENT (V20) equals 23   | RELATION TO JUNCTION (A9) should equal 05.                                       |
| VA005 | MOST HARMFUL EVENT (V20) equals 23   | TRAFFIC CONTROL DEVICE (A16) should not equal 01-51.                             |
| VA191 | CRITICAL EVENT (V26) equals 000  | FIRST HARMFUL EVENT (A6) and MOST HARMFUL EVENT (V20) should equal 02-03, 06-10. |

|       | IF  | THEN  |
|-------|---|---|
| VP010 | MOST HARMFUL EVENT (V20) equals 21  | at least one PERSON TYPE (P3) must be equal to 4 or 5.  |
| VP011 | MOST HARMFUL EVENT (V20) equals 22  | at least one PERSON TYPE (P3) must be equal to 6.   |
| VP012 | MOST HARMFUL EVENT (V20) equals 27  | at least one PERSON TYPE (P3) must equal of 3-4, 8.   |
| VP013 | MOST HARMFUL EVENT (V20) equals 06  | at least one occupant of this vehicle (PERSON TYPES (P3) 1-2, 9) must have INJURY SEVERITY (P9) equal to 1-5, 9 or blank. |
| VV021 | MOST HARMFUL EVENT (V20) equals 02  | FIRE OCCURRENCE (V16) for this vehicle should equal 1.  |
| VV062 | MOST HARMFUL EVENT (V20) equals 21, 22, or 27   | MANNER OF LEAVING SCENE (V19) should not equal 2.   |
| VV080 | DAMAGE AREAS (V25) equals<br>00000 and MOST HARMFUL<br>EVENT (V20) does not equal 01-10 | MANNER OF LEAVING SCENE (V19) should not equal 2.   |
| VV081 | any character coded for DAMAGE<br>AREAS (V25) equals 5                                  | MOST HARMFUL EVENT (V20) should equal 01, 08, 09, or 10.  |
| VV091 | MOST HARMFUL EVENT (V20) equals 05  | VEHICLE TRAILING (V13) must not equal 0.  |
| VV092 | MOST HARMFUL EVENT (V20) equals 05  | JACKKNIFE (V14) must equal 1.   |
| VV116 | MOST HARMFUL EVENT (V20) equals 01 and BODY TYPE (V5) does not equal 80-89              | ROLLOVER TYPE (V30) must not equal 00.  |

# V21 Movement Prior to Critical Event (Precrash 1)

#### **Element Values**



- 00 No Driver Present
- 01 Going Straight
- 02 Decelerating In Traffic Lane
- 03 Starting In Traffic Lane
- 04 Stopped In Traffic Lane
- 05 Passing Or Overtaking Another Vehicle
- 06 Disabled Or Parked In Travel Lane
- 07 Leaving A Parked Position
- 08 Entering A Parked Position
- 10 Turning Right
- 11 Turning Left
- 12 Making A U-turn
- 13 Backing Up (Other Than For Parking Purposes)
- 15 Negotiating A Curve
- 16 Changing Lanes
- 17 Merging
- 18 Successful Corrective Action To A Previous Critical Event
- 98 Other
- 99 Unknown

#### Remarks

Record the attribute which best describes this vehicle's activity prior to the driver's realization of an impending critical event or just prior to impact if the driver took no action or had no time to attempt to any evasive maneuvers.

Actions taken by the driver of this vehicle, after realization of an impending danger are coded in V27 (Corrective Action Attempted).



Enter "00" (No Driver Present) when there are no persons in this vehicle (Number of Occupants, V10, is coded "00"). Also, use this code when no person in this vehicle is coded as the driver (D01=0). This code will also be used when this vehicle is being pushed by another vehicle

or a pedestrian and there is no one sitting in the driver's position (no person to be coded Person Type, P03, equal to 1).



Enter "01" (Going Straight) if the vehicle is in motion (constant or increasing speed) on a straight stretch of roadway--compare with elements "02" (Decelerating In Traffic Lane) and "15" (Negotiating A Curve). The length of the "straight stretch of roadway" need not be very long. For example, driver's going straight in a left or right turn lane are entered here.



Enter "02" (Decelerating In Traffic Lane) if the vehicle is in motion within a traffic lane and slowing its speed on either a straight or curve roadway segment. If the driver is changing lanes (intentionally or unintentionally), then use element "16" (Changing Lanes). If the vehicle is also passing or overtaking a line of stopped or slower moving traffic, then this element is used; see element "05" (Passing Or Overtaking Another Vehicle) below.

Enter "03" (Starting In Traffic Lane) if the vehicle is in motion within a traffic lane and is increasing its speed from a stopped position. The horizontal character of the roadway (straight versus curved) is not important.

Enter "04" (Stopped In Traffic Lane) if the vehicle is not in motion on a roadway. The horizontal character of the roadway is not important.

Enter "05" (Passing or Overtaking Another Vehicle) if the vehicle:

- is in motion,
- its speed is constant or increasing,
- · is engaged in passing other in-transport motor vehicles, and
- did not depart the road on which it was traveling. These "other in-transport motor vehicles"
  can be passed on either the left or right. The "passing/overtaking" may also occur on a
  one-way roadway. The horizontal character of the roadway is not considered.



Enter "06" (Disabled or Parked in Travel Lane) when this vehicle was parked in a travel lane (e.g., double parked, disabled) with a driver present in the vehicle. If the vehicle is disabled and there is no driver present, use element "00" (No Driver Present).

Enter "07" (Leaving a Parked Position) if the vehicle is in-transport and the vehicle was just previously not in-transport. The vehicle can be in either forward or reverse gears. The parked position can be either parallel or diagonal to the roadway; however, it must be on a trafficway. It may be on a shoulder, in a designated parking lane, etc. The vehicle's speed can be constant, increasing, or decreasing. For example, if a vehicle is impacted just after it backed out of a parking position while the driver is in the process of changing from reverse to forward gears, then enter this value. In general, associate the vehicle with leaving a parked position until such time as the vehicle has reached the prevailing travel speed determined by the environmental conditions present. This vehicle must have a driver in order to use this code.

Enter "08" (Entering a Parked Position) if the vehicle is in-transport on a trafficway and the intent of the driver is to "park" the vehicle; see element "06" (Disabled or Parked in Travel Lane). The vehicle can be in either forward or reverse gears. The parked position can be either parallel or diagonal to the roadway; however, it must be on a trafficway. It may be on a shoulder, in a designated parking lane, etc. The vehicle's speed can be constant, increasing, or decreasing. In general, associate the vehicle with entering a parked position from the point in time when the vehicle decreases its speed explicitly for the purpose of entering a specific parking position until such time as the vehicle is no longer in-transport.

Enter "10" (Turning Right) if the vehicle is in motion on a trafficway and the driver steers right at a junction into another trafficway, driveway, or alley.

Enter "11" (Turning Left) if the vehicle is in motion on a trafficway and the driver steers left at a junction into another trafficway, driveway, or alley.

#### Enter "12" (Making a U-turn) if the driver is:

- slowing to,
- engaged in, or
- accelerating after, steering his/her vehicle in a direction that is approximately opposite the driver's original direction of travel. The horizontal character of the trafficway is not a consideration.

Enter "13" [Backing Up (Other Than For Parking Purposes)] when the PAR indicates that the vehicle was backing and the backing was not related to parking or went beyond what would reasonably be considered associated with a parking purpose.

Enter "15" (Negotiating a Curve) if a vehicle in motion on a trafficway is entering, in, or exiting a curve horizontal roadway segment and is following the curve of the roadway. In other words, this element takes precedence over element "01" (Going Straight) but does not take precedence over elements "02" through "13" and "16" through "18". Exception: if an edgeline is crossed unintentionally resulting in an impact off the roadway, then use this element.

Enter "16" (Changing Lanes) when this vehicle was traveling straight ahead and changed travel lanes to the right or left while on same roadway.

Enter "17" (Merging) when this vehicle was moving forward and merging from the left or right into a traffic lane (e.g., roadway narrows, exit/entrance ramps).

Enter "18" (Successful Corrective Action to a Previous Critical Event) when this vehicle responded to a previous critical event and successfully avoided an impact just prior to the first harmful event.



Enter "98" (Other) whenever any of the specific situations cited below occurs. The occurrence of these specific situations overrides their applicability to any of the preceding elements with the exception of "00" (No Driver Present). Whenever a driverless vehicle is involved, "00" (No Driver Present) takes precedence over "98" (Other).

- A vehicle enters into or crosses through a median of divided trafficway.
- A vehicle travels the wrong way on a one-way trafficway.
- A vehicle exits a driveway, alley, private road, or private property; in other words, a vehicle
  attempts to enter a roadway associated with a trafficway from an area which is not associated
  with a trafficway.
- A vehicle is pushed by another vehicle.
- A vehicle is pushed by a pedestrian.

Also, use this code for any other situation which does not fit in any of the other elements above.

Enter "99" (Unknown) when it is unknown what the vehicle action (maneuver) was preceding its involvement in the accident, or if the information is unclear or inadequate to determine which of the above elements applies.

# **Consistency Check**

| AV022 | FIRST HARMFUL EVENT (A6) equals 21 and NUMBER OF NON-MOTORISTS (A04) equals 01 and PEDESTRIAN/BIKE ACCIDENT TYPE (A24) equals 0220 | THEN at least one MOVEMENT PRIOR TO CRITICAL EVENT (V21) must equal 07, 08, 13, or 98.      |
|-------|--|---|
| AV030 | PEDESTRIAN/BIKE ACCIDENT<br>TYPE (A24) equals 0011   | at least one MOVEMENT PRIOR TO CRITICAL EVENT (V21) must equal 13 or 98.                    |
| AV031 | PEDESTRIAN/BIKE ACCIDENT<br>TYPE (A24) equals 0035   | at least one MOVEMENT PRIOR TO CRITICAL EVENT (V21) must equal 07 or 08.                    |
| AV032 | PEDESTRIAN/BIKE ACCIDENT<br>TYPE (A24) equals 0022, 0023, or<br>0033   | at least one MOVEMENT PRIOR TO CRITICAL EVENT (V21) must equal 11.                          |
| AV033 | PEDESTRIAN/BIKE ACCIDENT<br>TYPE (A24) equals 0010, 0024, or<br>0034   | at least one MOVEMENT PRIOR TO CRITICAL EVENT (V21) must equal 10.                          |
| AV042 | PEDESTRIAN/BIKE ACCIDENT<br>TYPE (A24) equals 0720   | at least one MOVEMENT PRIOR TO CRITICAL EVENT (V21) should equal 10, 11, 12, 17, 98, or 99. |
| AV055 | PEDESTRIAN/BIKE ACCIDENT<br>TYPE (A24) equals 0003, 0018,<br>0019, or 0021   | at least one MOVEMENT PRIOR TO CRITICAL EVENT (V21) should equal 01.                        |
| AV071 | FIRST HARMFUL EVENT (A6) equals 21, 22, or 24, and MOVEMENT PRIOR TO CRITICAL EVENT (V21) is not equal to 13                       | ACCIDENT TYPE (V23) should equal 13.  |
| AV134 | RELATION TO JUNCTION (A9) equals 03 or 13  | at least one MOVEMENT PRIOR TO CRITICAL EVENT (V21) should equal 10, 11, or 98.             |
| VA090 | MOVEMENT PRIOR TO CRITICAL EVENT (V21) equals 15   | ROADWAY ALIGNMENT (A13) must equal 2.   |

V21

|       | IF   | THEN   |
|-------|--|--|
| VA218 | MOVEMENT PRIOR TO CRITICAL EVENT (V21) equals 00 and at least one PERSON TYPE (P3) equals 5, and, for that person, NONMOTORIST STRIKING VEHICLE # (P22) equals the vehicle # for which V21 equals 00 | PEDESTRIAN/BIKE ACCIDENT<br>TYPE (A24) must equal 0210.  |
| VA242 | MOVEMENT PRIOR TO CRITICAL<br>EVENT (V21) equals 10 or 11  | RELATED TO JUNCTION (A09) should not equal 00 or 10.   |
| VP046 | at least one MOVEMENT PRIOR<br>TO CRITICAL EVENT (V21)<br>equals 13 and at least one PERSON<br>TYPE (P3) equals 5  | PEDESTRIAN/BIKE ACCIDENT TYPE (A24) should equal 0220.   |
| VP047 | at least one MOVEMENT PRIOR<br>TO CRITICAL EVENT (V21)<br>equals 10-12, or 17 and at least one<br>PERSON TYPE (P3) equals 5  | PEDESTRIAN/BIKE ACCIDENT TYPE (A24) should equal 0720.   |
| VP056 | MOVEMENT PRIOR TO<br>CRITICAL EVENT (V21) equals 11<br>and at least one PERSON TYPE<br>(P3) equals 6   | PEDESTRIAN/BIKE ACCIDENT<br>TYPE (A24) should equal 0005, 0009,<br>0010, 0012, 0022, 0023, 0033, 0048,<br>or 0049. |
| VP057 | MOVEMENT PRIOR TO<br>CRITICAL EVENT (V21) equals 13<br>and at least one PERSON TYPE<br>(P3) equals 6   | PEDESTRIAN/BIKE ACCIDENT<br>TYPE (A24) should equal 0011.  |
| VP136 | MOVEMENT PRIOR TO<br>CRITICAL EVENT (V21) equals 10<br>and at least one PERSON TYPE<br>(P3) equals 6   | PEDESTRIAN/BIKE ACCIDENT<br>TYPE (A24) should equal 0005, 0009,<br>0010, 0012, 0024, 0034, 0048, or<br>0049.       |
| VV026 | JACKKNIFE (V14) equals 1   | MOVEMENT PRIOR TO CRITICAL EVENT (V21) must not equal 03-04, 06-08, 13.  |
| VV027 | TRAVEL SPEED (V11) equals 00   | MOVEMENT PRIOR TO CRITICAL EVENT (V21) must equal 04, 06, 07, 08, 18, 98, or 99.                                   |
| VV049 | MOVEMENT PRIOR TO<br>CRITICAL EVENT (V21) equals 04<br>or 06   | VEHICLE ROLE (V22) should not equal 1.   |

| VV052 | IF ACCIDENT TYPE (V23) equals 21, 22, or 23   | THEN MOVEMENT PRIOR TO CRITICAL EVENT (V21) must equal 04, 06, 18, 98, or 99.                       |
|-------|---|---|
| VV053 | ACCIDENT TYPE (V23) equals 26, 30, 68, 72, 76, or 82  | MOVEMENT PRIOR TO CRITICAL EVENT (V21) should equal 11 or 98.                                       |
| VV054 | ACCIDENT TYPE (V23) equals 27, 31, 70, 78, or 80  | MOVEMENT PRIOR TO CRITICAL EVENT (V21) should equal 10 or 98.                                       |
| VV055 | ACCIDENT TYPE (V23) equals 29, 30, or 31  | MOVEMENT PRIOR TO CRITICAL EVENT (V21) should equal 02.   |
| VV063 | MOVEMENT PRIOR TO<br>CRITICAL EVENT (V21) equals 12   | ACCIDENT TYPE (V23) should equal 98.  |
| VV070 | ACCIDENT TYPE (V23) equals 46 or 47   | MOVEMENT PRIOR TO CRITICAL EVENT (V21) should equal 05, 16, or 17.                                  |
| VV071 | ACCIDENT TYPE (V23) equals 92   | MOVEMENT PRIOR TO CRITICAL EVENT (V21) should equal 07, 08, 13, 98, or 99.                          |
| VV078 | ACCIDENT TYPE (V23) equals 25, 26, 27, 29, 30, or 31  | MOVEMENT PRIOR TO CRITICAL EVENT (V21) should not equal 04 or 06.                                   |
| VV094 | MOVEMENT PRIOR TO<br>CRITICAL EVENT (V21) equals 10   | ACCIDENT TYPE (V23) must not equal 44-67, 68, 69, 71, 72, 73, 76, 77, 79, 81, 82, 83, 86-91, or 92. |
| VV095 | MOVEMENT PRIOR TO CRITICAL EVENT (V21) equals 11  | ACCIDENT TYPE (V23) must not equal 44-67, 69, 70, 71, 73, 77, 78, 79, 80, 81, 83, 86-91, or 92.     |
| VV096 | MOVEMENT PRIOR TO CRITICAL EVENT (V21) equals 13  | ACCIDENT TYPE (V23) should equal 92 or 98.  |
| VV106 | ACCIDENT TYPE (V23) equals 50, 51, 52, or 53, and MOVEMENT PRIOR TO CRITICAL EVENT (V21) equals 01, 02, 03, 05, 15, 16, or 17 | VEHICLE ROLE (V22) must equal 1 or 3.   |

| VV183 | IF CRITICAL EVENT (V26) equals 440-459 and CORRECTIVE ACTION ATTEMPTED (V27) equals 00 | THEN MOVEMENT PRIOR TO CRITICAL EVENT (V21) should equal 98. |
|-------|--|--|
| VV213 | DRIVER MANEUVERED TO<br>AVOID (D6) equals 00   | MOVEMENT PRIOR TO CRITICAL EVENT (V21) must not equal 18.    |
| VV217 | MOVEMENT PRIOR TO<br>CRITICAL EVENT (V21) equals 18                                    | DRIVER MANEUVERED TO AVOID (D6) should not equal 00.         |
| VV231 | DRIVER PRESENCE (D1) equals 0  | MOVEMENT PRIOR TO CRITICAL<br>EVENT (V21) must equal 00.     |
| VV232 | MOVEMENT PRIOR TO CRITICAL<br>EVENT (V21) equals 00                                    | CORRECTIVE ACTION ATTEMPTED (V27) must equal 00 or 94.       |
| VV233 | MOVEMENT PRIOR TO CRITICAL<br>EVENT (V21) equals 00                                    | PRECRASH VEHICLE CONTROL (V28) must equal 00 or 94.          |
| VV235 | PRECRASH LOCATION (V29) equals 00  | MOVEMENT PRIOR TO CRITICAL<br>EVENT (V21) must equal 00.     |
| VV236 | MOVEMENT PRIOR TO CRITICAL<br>EVENT (V21) equals 00                                    | DRIVER PRESENCE (D01) must equal 0.                          |
| VV243 | ACCIDENT TYPE (V23) equals 46 or 47  | MOVEMENT PRIOR TO CRITICAL EVENT (V21) must not equal 01.    |

## V22 Vehicle Role

#### **Element Values**

- 0 Noncollision
- 1 Striking
- 2 Struck
- 3 Both
- 9 Unknown

#### Remarks

Enter "0" (Noncollision) only when the noncollision occurred first, even if subsequent impacts occurred. Noncollision includes rollover/overturned (which includes overturning motorcycles), fire/explosion, jackknifed, or immersion.

A vehicle that sets an object (e.g., cargo, spewed gravel, etc.) in motion which strikes or is struck by another motor vehicle prior to stabilization of the object, receives this code. The other in-transport vehicle is coded "1" (Striking) if it is moving or "2" (Struck) if it is stationary, irrespective of the wording of the narrative.

Enter "1" (Striking) if a vehicle in motion contacts an another vehicle, pedestrian, nonmotorist, or object with its leading end and/or side. A vehicle must be in motion to be a striking vehicle.

It is possible for both vehicles to be considered striking. This occurs in the cases of head-on collisions, and for sideswiping vehicles (including front or rear endswipes).

Enter "2" (Struck) if a vehicle is moving forward and is not in rotation and contacts another vehicle, pedestrian, or non-motorist with other than its front. A vehicle not in motion is struck unless subsequent impacts result in which the vehicle is striking (use "3" [Both] in these situations).

Enter "3" (Both) when a vehicle is both striking and struck. The two impacts cannot occur with the same vehicle, object, or person. The classic example of a vehicle which is both striking and struck is the chain reaction rear-end where the vehicle which is striking and struck is located within the chain.

The decision should be based on the above stated rules and not necessarily the wording in the narrative. The decision may, therefore, contradict the narrative in some cases (e.g. The narrative describes V1 as striking V2 yet the damage indicates that V2 was striking and V1 was struck).

## **Consistency Check**

|             |       | _   | V22   |
|-------------|-------|---|---|
|             | AV014 | IF MANNER OF COLLISION (A7) equals 2  | THEN VEHICLE ROLE (V22) should equal 1 or 3.              |
|             | AV089 | PEDESTRIAN/BIKE ACCIDENT<br>TYPE (A24) equals 0840  | at least one VEHICLE ROLE (V22) must equal 2.             |
|             | AV131 | FIRST HARMFUL EVENT (A6) equals 01-09   | at least one VEHICLE ROLE (V22) must equal 0.             |
|             | AV197 | NUMBER OF MOTOR VEHICLES (A3) equals 02 and one vehicle's VEHICLE ROLE (V22) equals 2                                   | the other vehicle's VEHICLE ROLE (V22) must not equal 2.  |
|             | AV213 | NUMBER OF MOTOR VEHICLES (A3) equals 02 and MANNER OF COLLISION (A7) equals 2 and TRAVEL SPEED (V11) is greater than 00 | VEHICLE ROLE (V22) must equal 1 or 3.                     |
|             | AV232 | FIRST HARMFUL EVENT (A6) equals 21-99   | no VEHICLE ROLE (V22) should equal 0.                     |
|             | VA093 | VEHICLE ROLE (V22) equals 2<br>and NUMBER OF MOTOR<br>VEHICLES (A3) equals 01   | FIRST HARMFUL EVENT (A6) must not equal 31-50, 58, or 59. |
| <b>K</b> @∾ | VA096 | NUMBER OF MOTOR VEHICLES (A3) equals 01 and VEHICLE ROLE (V22) equals 0   | FIRST HARMFUL EVENT (A6) should equal 01-10.              |
|             | VV028 | UNLIKELY: VEHICLE ROLE (V22) is   | equal to 9.   |
|             | VV031 | TRAVEL SPEED (V11) equals 00  | VEHICLE ROLE (V22) should not equal 1.                    |
|             | VV049 | MOVEMENT PRIOR TO<br>CRITICAL EVENT (V21) equals 04<br>or 06  | VEHICLE ROLE (V22) should not equal 1.                    |
|             | VV064 | VEHICLE ROLE (V22) equals 1<br>and ACCIDENT TYPE (V23)<br>equals 92   | INITIAL POINT OF IMPACT (V24) must not equal 01.          |

|                | IF  | THEN   |
|----------------|---|--|
| VV067          | ACCIDENT TYPE (V23) equals 86 or 88   | VEHICLE ROLE (V22) must not equal 2.               |
| VV068          | ACCIDENT TYPE (V23) equals 87 or 89   | VEHICLE ROLE (V22) must not equal 1.               |
| VV072          | ACCIDENT TYPE (V23) equals 50, 51, 52, or 53  | VEHICLE ROLE (V22) should equal 1.                 |
| VV075          | ACCIDENT TYPE (V23) equals 01-12, 14, 20, 24, 28, 34, 36, 38, 40  | VEHICLE ROLE (V22) must not equal 2.               |
| VV0 <b>7</b> 9 | ACCIDENT TYPE (V23) equals 21, 22, 23, 25, 26, 27, 29, 30, or 31  | VEHICLE ROLE (V22) must not equal 1.               |
| VV082          | ACCIDENT TYPE (V23) equals 00   | VEHICLE ROLE (V22) must equal 0.                   |
| VV104          | ACCIDENT TYPE (V23) equals 68, and VEHICLE ROLE (V22) equals 2  | INITIAL POINT OF IMPACT (V24) should not equal 03. |
| VV106          | ACCIDENT TYPE (V23) equals 50, 51, 52, or 53, and MOVEMENT PRIOR TO CRITICAL EVENT (V21) equals 01, 02, 03, 05, 15, 16, or 17 | VEHICLE ROLE (V22) must equal 1 or 3.              |
| VV177          | INITIAL POINT OF IMPACT (V24) equals 01 and TRAVEL SPEED (V11) is greater than 00   | VEHICLE ROLE (V22) should not equal 2.             |
| VV190          | DRIVER PRESENCE (D1) equals 0   | VEHICLE ROLE (V22) should not equal 0 or 9.        |
| VV222          | DAMAGE AREAS (V25) equals 00000 and VEHICLE ROLE (V22) is not equal to 0  | DAMAGE SEVERITY (V18) must equal 0.                |
| VV227          | CRITICAL EVENT (V26) equals 210, 215, or 520  | VEHICLE ROLE (V22) must not equal 1.               |
| VV228          | CRITICAL EVENT (V26) equals 220, 510, or 515  | VEHICLE ROLE (V22) must not equal 2.               |

| <b>₽</b> Ø | VV229 | IF VEHICLE ROLE (V22) equals 1 | THEN CRITICAL EVENT (V26) must not equal 210, 215, or 520. |
|------------|-------|--------------------------------|--|
|            | VV230 | VEHICLE ROLE (V22) equals 2    | CRITICAL EVENT (V26) must not equal 220, 510, or 515.      |

# **V23 Accident Type**

| Element Values |  |
|----------------|--|
| Range:         | 00-16, 20-93, 97, 98, 99   |
| 00             | No Impact  |
|                | Code the number from the Accident Types Diagram that best describes the accident circumstance. |
| 97             | Untripped Rollover   |
| 98             | Other Accident Type  |
| 99             | Unknown  |

#### **Remarks**

This variable is used for categorizing the collisions of drivers involved in accidents. A collision is defined here as the **first harmful event** in an accident between a vehicle and some object, accompanied by property damage or human injury. The object may be another vehicle, a person, an animal, a fixed object, the road surface, or the ground. If the first collision is a rollover, the impact is with the ground or road surface. The collision may also involve plowing into soft ground, if severe vehicle deceleration results in damage or injury. A road departure without damage or injury is not defined as a collision.

To determine the proper accident type (AT), refer to the three step decision process outlined below:

- Step 1 Determine the appropriate category.
- Step 2 Determine the appropriate configuration.
- Step 3 Determine the specific accident type (two digit codes).

Each category is defined by an Accident Configuration(s). Configurations A through M are accessed by clicking on the category.

The categories are divided into six sections and are described as follows:

Category I. Single Driver - The first harmful event involves a collision between an in-transport vehicle and an object. A harmful event involving two in-transport vehicles is excluded from this category. Note, the impact location on the vehicle is not a consideration for accident types in this category.

Category II. Same Trafficway, Same Direction - The first harmful event occurred while both vehicles were traveling in the same direction on the same trafficway.

Category III. Same Trafficway, Opposite Direction - The first harmful event occurred while both vehicles were traveling in opposite directions on the same trafficway.

Category IV. Change Trafficway, Vehicle Turning - The first harmful event occurred when the vehicle is either turning or merging while attempting to change from one trafficway to another trafficway. Trafficway for this variable is loosely defined to include driveways, alleys and parking lots when a vehicle is either entering or exiting a trafficway.

Category V. Intersecting Paths (Vehicle Damage) - The first harmful event involves situations where vehicle trajectories intersect. It is important to note the location of damage to each vehicle for accident typing.

**Category VI. Miscellaneous -** The first harmful event involves an accident type which cannot be described in Categories I-V and thus is included in this category.

The configurations are delineated into specific accident types.

The accident types in Category I. (Single Driver) involve an impact between a vehicle and an object. Categories II. through VI. identify specific collision combinations which must be coded in specified pairs (i.e., the pair code defines the Accident Type). As an example, the combination "20" (Rear-end, stopped) and "32" (Rear-end, specifics other) or "20" (Rear-end, stopped) and "25" (Slower, straight ahead) are not valid since "20" (Rear-end, stopped) only has meaning when linked to codes "21"-"23" (Stopped, ....).

An accident involving a vehicle impacting a "driverless in-transport vehicle" is coded "..., specifics other" in the appropriate configuration-category. For example, a vehicle which impacts the rear of a driverless in-transport vehicle is encoded "32" (Rear-end, specifics other) and "32".

In accidents involving more than two vehicles or in collision sequences involving a combination of vehicle-to-object- to-vehicle impacts, code the Accident Type for the vehicle(s) involved in the first harmful event. All other vehicles are coded "98" (Other accident type).

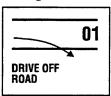
Keep in mind that **intended actions** play an important role in the coding scheme. For example, accident type "26" (Slower, turning left) is selected over type "25" (Slower, straight ahead) if the subject vehicle was traveling slower with the **intention** of turning left. Note, the turning action need not have occurred prior to the collision. The driver's **intent** to turn is the key.

#### Category I. Single Driver

#### Configuration A. Right Roadside Departure

The vehicle departed the right side of the road with the first harmful event occurring off the road.

#### 01 Right Roadside Departure: Drive Off Road



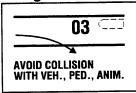
Enter "01" when the vehicle departed the road under a controlled situation (e.g., the driver was distracted, fell asleep, intentionally departed, etc.

02 Right Roadside Departure: Control/Traction Loss



Enter "02" when there is evidence that the vehicle lost traction or "got away" from the driver in some other way (e.g., the vehicle spun off the road as a result of surface conditions, oversteer phenomena, or mechanical malfunctions). If doubt exists, code "01" (Right Roadside Departure, Drive Off Road).

03 Right Roadside Departure: Avoid Collision With Vehicle, Pedestrian, Animal



Enter "03" when the vehicle departed the road to avoid something on the road. Phantom vehicle situations, pedestrians, bicyclists, and other cyclists and nonmotorists are included here.

04 Right Roadside Departure: Specifics Other



Enter "04" if the vehicle departed the road to avoid something on the road other than a vehicle, pedestrian, or animal. Also use "Specifics Other" for accidents involving a driverless in-transport vehicle.

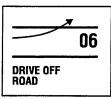
05 Right Roadside Departure: Specifics Unknown



Enter "05" if the vehicle departed the right side of the road for unknown reasons.

#### Configuration B. Left Roadside Departure

06 Left Roadside Departure: Drive Off Road



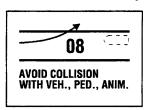
Enter "06" when the vehicle departed the road under a controlled situation (e.g., the driver was distracted, fell asleep, intentionally departed, etc.)

#### 07 Left Roadside Departure: Control/Traction Loss



Enter "07" if there is evidence that the vehicle lost traction or "got away" from the driver in some other way (e.g., the vehicle spun off the road as a result of surface conditions, oversteer phenomena, or mechanical malfunctions.) If doubt exists, code "06" (Left Roadside Departure, Drive Off Road).

#### 08 Left Roadside Departure: Avoid Collision With Vehicle, Pedestrian, Animal



Enter "08" when the vehicle departed the road to avoid something on the road. Phantom vehicle situations, pedestrians, bicyclists, and other cyclists and nonmotorists are included here.

#### 09 Left Roadside Departure: Specifics Other



Enter "09" if the vehicle departed the road to avoid something on the road other than a vehicle, pedestrian, or animal. Also, use "Specifics Other" for accidents involving a driverless in-transport vehicle.

#### 10 Left Roadside Departure: Specifics Unknown

10 SPECIFICS UNKNOWN

Enter "10" if the vehicle departed the left side of the road for unknown reasons.

#### Configuration C. Forward Impact

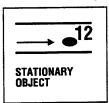
The vehicle struck an object on the road or off the end of a trafficway while moving forward.

#### 11 Forward Impact: Parked Vehicle



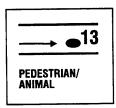
Enter "11" if the accident involves impact with a parked vehicle on either side of the road.

#### 12 Forward Impact: Stationary Object



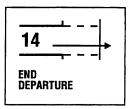
Enter "12" if the accident involves impact with a stationary object on either side of the road.

#### 13 Forward Impact: Pedestrian/Animal



Enter "13" if the first harmful event involves impact with a pedestrian or animal on either side of the road. Pedestrians, bicyclists, and other cyclists and nonmotorists are included here. Vehicle plane of contact is NOT a consideration.

#### 14 Forward Impact: End Departure



Enter "14" when the vehicle ran off the end of the road and crashed into something.

#### 15 Forward Impact: Specifics Other

15 SPECIFICS OTHER

Enter "15" for impacted (striking or struck) trains and nonstationary objects on the road. Also use "Specifics Other" for accidents involving a driverless in-transport vehicle.

#### Forward Impact: Specifics Unknown



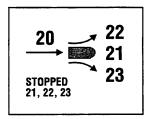
Enter "16" when the PAR indicates a single driver was involved in a forward impact collision, but no further classification is possible.

#### Category II. Same Trafficway, Same Direction

#### Configuration D. Rear-End

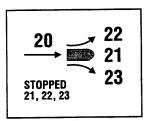
The front of the overtaking vehicle impacted the rear of the other vehicle. Note, even if the rear-impacted vehicle had started to make a turn, code here (not in Category IV).

#### 20 Rear-End: Stopped



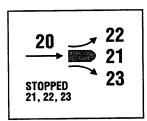
Enter "20" for a vehicle that impacts another vehicle from the rear when the impacted vehicle was stopped in the trafficway.

## 21 Rear-End: Stopped, Straight



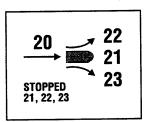
Enter "21" for a rear-impacted vehicle that was stopped in the trafficway, and was intending to proceed straight ahead.

## 22 Rear-End: Stopped, Left



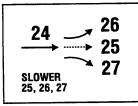
Enter "22" for a rear-impacted vehicle that was stopped in the trafficway, intending to make a left turn.

## 23 Rear-End: Stopped, Right



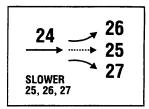
Enter "23" for a rear-impacted vehicle that was stopped in the trafficway, intending to make a right turn.

#### 24 Rear-End: Slower



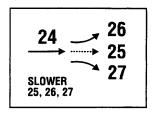
Enter "24" for a vehicle that impacts another vehicle from the rear when the impacted vehicle was going slower than the striking vehicle.

#### 25 Rear-End: Slower, Going Straight



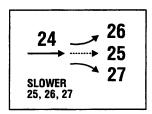
Enter "25" for a rear-impacted vehicle that was going slower than the other vehicle while proceeding straight ahead.

### 26 Rear-End: Slower, Going Left



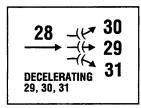
Enter "26" for a rear-impacted vehicle that was going slower than the other vehicle while turning left.

#### 27 Rear-End: Slower, Going Right



Enter "27" for a rear-impacted vehicle that was going slower than the other vehicle while turning right.

#### 28 Rear-End: Decelerating (Slowing)



Enter "28" for a vehicle impacts another vehicle from the rear when the impacted vehicle was slowing down.

29 Rear-End: Decelerating (Slowing), Going Straight

Enter "29" for a rear-impacted vehicle that was slowing down while proceeding straight ahead.

30 Rear-End: Decelerating (Slowing), Going Left

Enter "30" for a rear-impacted vehicle that was slowing down while turning left.

31 Rear-End: Decelerating (Slowing), Going Right

Enter "31" for a rear-impacted vehicle that was slowing down while turning right.

32 Rear-End: Specifics Other

SPECIFICS OTHER

Enter "32" for rear-end collisions which cannot be described in "20"-"31." Enter "Specifics Other" for accidents involving a driverless in-transport vehicle.

33 Rear-End: Specifics Unknown

EACH: 33
SPECIFICS
UNKNOWN

Enter "33" when the PAR indicates a rear-end collision occurred, but no further classification is possible.

#### **Configuration E. Forward Impact**

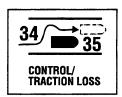
The front of the overtaking vehicle impacted the rear of the other vehicle, following a steering maneuver around a noninvolved vehicle or object.

#### 34 Forward Impact: Control/Traction Loss



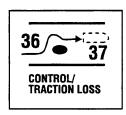
Enter "34" for a vehicle that's frontal area impacts another vehicle due to loss of control or traction (during a maneuver to avoid collision with a third vehicle) while both are traveling on the same trafficway in the same direction.

#### 35 Forward Impact: Control/Traction Loss



Enter "35" for a vehicle which is impacted by the frontal area of another vehicle due to loss of control or traction (during a maneuver to avoid collision with a third vehicle) while both are traveling on the same trafficway in the same direction.

#### 36 Forward Impact: Control/Traction Loss



Enter "36" for a vehicle that's frontal area impacts another vehicle due to loss of control or traction (during a maneuver to avoid collision with an object) while both are traveling on the same trafficway in the same direction.

#### 37 Forward Impact: Control/Traction Loss



Enter "37" for a vehicle which is impacted by the frontal area of another vehicle due to loss of control or traction (during a maneuver to avoid collision with an object) while both are traveling on the same trafficway in the same direction.

38 Forward Impact: Avoid Collision with Vehicle



Enter "38" for a vehicle that's frontal area impacts another vehicle while maneuvering to avoid collision with a third vehicle, when loss of control or traction was not a factor, and both were traveling on the same trafficway, in the same direction.

39 Forward Impact: Avoid Collision with Vehicle



Enter "39" for a vehicle that was impacted by the frontal area of another vehicle which was maneuvering to avoid collision with a third vehicle, when loss of control or traction was not a factor, and both were traveling on the same trafficway, in the same direction.

40 Forward Impact: Avoid Collision with Object



Enter "40" for a vehicle that's frontal area impacts another vehicle while maneuvering to avoid collision with an object, when loss of control or traction was not a factor, and both were traveling on the same trafficway, in the same direction.

41 Forward Impact: Avoid Collision with Object



Enter "41" for a vehicle which was impacted by the frontal area of another vehicle which was maneuvering to avoid collision with an object, when loss of control or traction was not a factor, and both were traveling on the same trafficway, in the same direction.

#### 42 Forward Impact: Specifics Other

EACH: 42 SPECIFICS OTHER

Enter "42" for a forward impact collision which occurred while both vehicles were traveling on the same trafficway and in the same direction, and which cannot be described by "34" - "40." Enter "Specifics Other" for accidents involving a driverless in-transport vehicle.

#### 43 Forward Impact: Specifics Unknown

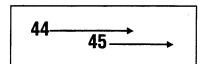
EACH: 43
SPECIFICS
UNKNOWN

Enter "43" when the PAR indicates that a forward impact collision occurred while both vehicles were traveling on the same trafficway and in the same direction, but no further classification was possible.

#### Configuration F. Sideswipe/Angle

The two vehicles are involved in an impact involving the side of one or both vehicles.

#### 44 Sideswipe/Angle: Straight Ahead on Left



The following four codes, "44" (Sideswipe/Angle, straight ahead on left), "45" (Sideswipe/Angle, straight ahead on left/right), "46" (Sideswipe/Angle, changing lanes to the right), "47" (Sideswipe/Angle, changing lanes to the left), identify relative vehicle positions (left versus right) and lane of travel intentions (straight ahead versus changing lanes). From these four codes, four combinations are permitted. They are:

- "44" and "45"
- "46" and "45"
- "45" and "47"
- "46" and "47".

When used in combination, these codes refer to a sideswipe or angle collision which involved a vehicle to the left of a vehicle to the right where:

- neither vehicle (codes "44" and "45") intended to change its lane;
- the vehicle on the left (code "46") was changing lanes to the right, and the vehicle on the right (code "45") was not intending to change its lane;
- the vehicle on the left (code "45") was not intending to change its lane, and the vehicle on the right (code "47") was changing lanes to the left; and
- the vehicle on the left (code "46") was changing lanes to the right, and the vehicle on the right (code "47") was changing lanes to the left.

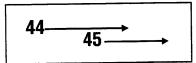
In addition, when:

- the right sides of the two vehicles impact following a 180 degree rotation of the vehicle on the right, or
- the left sides of the two vehicles impact following a 180 degree rotation of the vehicle on the left.

Select the appropriate combination depending upon:

- their positions (i.e., left versus right).
- the intended lane of travel (straight ahead versus changing lanes) of their drivers.

## 45 Sideswipe/Angle: Straight Ahead on Left/Right



The following four codes, "44" (Sideswipe/Angle, straight ahead on left), "45" (Sideswipe/Angle, straight ahead on left/right), "46" (Sideswipe/Angle, changing lanes to the right), "47" (Sideswipe/Angle, changing lanes to the left), identify relative vehicle positions (left versus right) and lane of travel intentions (straight ahead versus changing lanes).

From these four codes, four combinations are permitted. They are:

- "44" and "45"
- "46" and "45"
- "45" and "47"
- "46" and "47"

When used in combination, these codes refer to a sideswipe or angle collision which involved a vehicle to the left of a vehicle to the right where:

- neither vehicle (codes "44" and "45") intended to change its lane;
- the vehicle on the left (code "46") was changing lanes to the right, and the vehicle on the right (code "45") was not intending to change its lane;
- the vehicle on the left (code "45") was not intending to change its lane, and the vehicle on the right (code "47") was changing lanes to the left; and
- the vehicle on the left (code "46") was changing lanes to the right, and the vehicle on the right (code "47") was changing lanes to the left.

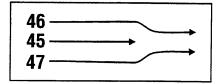
In addition, when:

- the right sides of the two vehicles impact following a 180 degree rotation of the vehicle on the right, or
- the left sides of the two vehicles impact following a 180 degree rotation of the vehicle on the left.

Select the appropriate combination depending upon:

- their positions (i.e., left versus right) and
- the intended lane of travel (straight ahead versus changing lanes) of their drivers.

#### 46 Sideswipe/Angle: Changing Lanes to the Right



The following four codes,

- "44" (Sideswipe/Angle, straight ahead on left)
- "45" (Sideswipe/Angle, straight ahead on left/right)
- "46" (Sideswipe/Angle, changing lanes to the right)
- "47" (Sideswipe/Angle, changing lanes to the left)

identify relative vehicle positions (left versus right) and lane of travel intentions (straight ahead versus changing lanes). From these four codes, four combinations are permitted. They are:

- "44" and "45"
- "46" and "45"
- "45" and "47"
- "46" and "47"

When used in combination, these codes refer to a sideswipe or angle collision which involved a vehicle to the left of a vehicle to the right where:

- neither vehicle (codes "44" and "45") intended to change its lane;
- the vehicle on the left (code "46") was changing lanes to the right, and the vehicle on the right (code "45") was not intending to change its lane;
- the vehicle on the left (code "45") was not intending to change its lane, and the vehicle on the right (code "47") was changing lanes to the left; and
- the vehicle on the left (code "46") was changing lanes to the right, and the vehicle on the right (code "47") was changing lanes to the left.

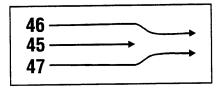
In addition, when:

- the right sides of the two vehicles impact following a 180 degree rotation of the vehicle on the right, or
- the left sides of the two vehicles impact following a 1 80 degree rotation of the vehicle on the left,

Select the appropriate combination depending upon:

- their positions (i.e., left versus right) and
- the intended lane of travel (straight ahead versus changing lanes) of their drivers.

## 47 Sideswipe/Angle: Changing Lanes to the Left



The following four codes,

- "44" (Sideswipe/Angle, straight ahead on left)
- "45" (Sideswipe/Angle, straight ahead on left/right)
- "46" (Sideswipe/Angle, changing lanes to the right)
- "47" (Sideswipe/Angle, changing lanes to the left)

identify relative vehicle positions (left versus right) and lane of travel intentions (straight ahead versus changing lanes).

From these four codes, four combinations are permitted. They are:

- "44" and "45"
- "46" and "45"
- "45" and "47"
- "46" and "47"

When used in combination, these codes refer to a sideswipe or angle collision which involved a vehicle to the left of a vehicle to the right where:

- neither vehicle (codes "44" and "45") intended to change its lane;
- the vehicle on the left (code "46") was changing lanes to the right, and the vehicle on the right (code "45") was not intending to change its lane;
- the vehicle on the left (code "45") was not intending to change its lane, and the vehicle on the right (code "47") was changing lanes to the left; and
- the vehicle on the left (code "46") was changing lanes to the right, and the vehicle on the right (code "47") was changing lanes to the left. In addition, when:
- the right sides of the two vehicles impact following a 180 degree rotation of the vehicle on the right, or
- the left sides of the two vehicles impact following a 180 degree rotation of the vehicle on the left.

Select the appropriate combination depending upon:

- their positions (i.e., left versus right) and
- the intended lane of travel (straight ahead versus changing lanes) of their drivers.

#### 48 Sideswipe/Angle: Specifics Other

EACH: 48
SPECIFICS
OTHER

Enter "48" if one vehicle was behind the other prior to a sideswipe/angle collision occurring while both vehicles were traveling on the same trafficway and in the same direction.

For example, use this code when two vehicles are on the same trafficway and going the same direction, and one loses control and is struck in the side by the front of the other vehicle. However, if one vehicle rotates such that the impact is front to front, then use code "98" (Other accident type).

Enter "Specifics Other" for accidents involving a driverless in-transport vehicle.

#### 49 Sideswipe/Angle: Specifics Unknown



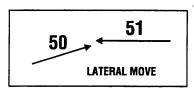
Enter "49" for sideswipe/angle collisions that occur while both vehicles are traveling on the same trafficway and in the same direction, when no further classification is possible.

## Category III. Same Trafficway, Opposite Direction

#### Configuration G. Head-On

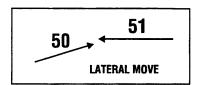
The frontal area of one vehicle impacted the frontal area of another.

#### 50 Head-On: Lateral Move (Left/Right)



Enter "50" for a vehicle that moves laterally (sideways) immediately before colliding head-on with another vehicle, when the vehicles are traveling on the same trafficway in opposite directions.

#### 51 Head-On: Lateral Move (Going Straight)



Enter "51" for a vehicle that collides head-on with another vehicle which has just moved laterally (sideways), when the vehicles are traveling on the same trafficway in opposite directions.

#### 52 Head-On: Specifics Other

EACH: 52 SPECIFICS OTHER

Enter "52" for a head-on collision that cannot be described by "50"-"51", when the vehicles are traveling on the same trafficway in opposite directions.

Enter "Specifics Other" for accidents involving a driverless in-transport vehicle.

## 53 Head-On: Specifics Unknown

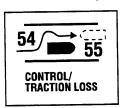
EACH: 53 SPECIFICS OTHER

Enter "53" when the PAR indicates a head-on collision occurred between two vehicles traveling on the same trafficway in opposite directions, when no further classification is possible.

## Configuration H. Forward Impact

The frontal area of one vehicle impacted the frontal area of another following a steering maneuver around a noninvolved vehicle or an object.

## 54 Forward Impact: Control/Traction Loss



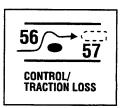
Enter "54" for a vehicle whose frontal area impacts another vehicle due to loss of control or traction (during a maneuver to avoid collision with a third vehicle) while the vehicles are traveling on the same trafficway in opposite directions.

# 55 Forward Impact: Control/Traction Loss



Enter "55" for a vehicle which is impacted by the frontal area of another vehicle due to loss of control or traction (during a maneuver to avoid collision with a third vehicle) while the vehicles are traveling on the same trafficway in opposite directions.

#### 56 Forward Impact: Control/Traction Loss



Enter "56" for a vehicle whose frontal area impacts another vehicle due to loss of control or traction (during a maneuver to avoid collision with an object) while the vehicles are traveling on the same trafficway in opposite directions.

#### 57 Forward Impact: Control/Traction Loss



Enter "57" for a vehicle which is impacted by the frontal area of another vehicle due to loss of control or traction (during a maneuver to avoid collision with an object) while the vehicles are traveling on the same trafficway in opposite directions.

#### 58 Forward Impact: Avoid Collision with Vehicle



Enter "58" for a vehicle whose frontal area impacts another vehicle while maneuvering to avoid collision with a third vehicle, when loss of control or traction was not a factor, and the vehicles were traveling on the same trafficway, in opposite directions.

#### 59 Forward Impact: Avoid Collision with Vehicle



Enter "59" for a vehicle which was impacted by the frontal area of another vehicle which was maneuvering to avoid collision with a third vehicle, when loss of control or traction was not a factor, and the vehicles were traveling on the same trafficway, in opposite directions.

# 60 Forward Impact: Avoid Collision with Object



Enter "60" for a vehicle whose frontal area impacts another vehicle while maneuvering to avoid collision with an object, when loss of control or traction was not a factor, and the vehicles were traveling on the same trafficway, in opposite directions.

# 61 Forward Impact: Avoid Collision with Object



Enter "61" for a vehicle which was impacted by the frontal area of another vehicle which was maneuvering to avoid collision with an object, when loss of control or traction was not a factor, and the vehicles were traveling on the same trafficway, in opposite directions.

## 62 Forward Impact: Specifics Other

EACH: 62 SPECIFICS OTHER

Enter "62" for forward impact collisions occurring while the vehicles were traveling on the same trafficway in opposite directions which cannot be described by "54"-"61". Enter "Specifics Other" for accidents involving a driverless in-transport vehicle.

# 63 Forward Impact: Specifics Unknown

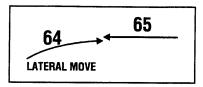
EACH: 63
SPECIFICS
UNKNOWN

Enter "63" when the PAR indicates a forward impact collision occurred while the vehicles were traveling on the same trafficway in opposite directions, but no further classification is possible.

### Configuration I. Sideswipe/Angle

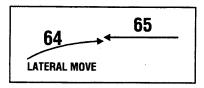
The two vehicles are involved in an impact involving the side of one or both vehicles.

### 64 Sideswipe/Angle: Lateral Move (Left/Right)



Code "64" identifies the vehicle which infringed upon the other vehicle (code "65") in a Category III, Configuration I collision; i.e., enter "64" for the vehicle which made the lateral move leading to the collision.

#### 65 Sideswipe/Angle: Lateral Move (Going Straight)



Enter "65" for the vehicle which was infringed upon by the other vehicle (code "64") in a Category III, Configuration I collision.

#### 66 Sideswipe/Angle: Specifics Other

EACH: 66 SPECIFICS OTHER

Enter "66" for sideswipe/angle collisions occurring while both vehicles were traveling on the same trafficway in opposite directions which cannot be described by "64"-"65". Enter "Specifics Other" for accidents involving a driverless in-transport vehicle.

#### 67 Sideswipe/Angle: Specifics Unknown

EACH: 67 SPECIFICS UNKNOWN

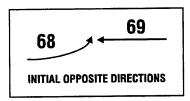
Enter "67" when the PAR indicates a sideswipe/angle collision occurred while both vehicles were traveling on the same trafficway in opposite directions, but no further classification is possible.

# Category IV. Changing Trafficway, Vehicle Turning

## Configuration J. Turn Across Path

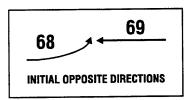
The two vehicles were initially on the same trafficway when one vehicle tried to turn onto another trafficway and pulled in front of the other vehicle. Vehicles making a "U" turn are identified in Category VI. Miscellaneous.

#### 68 Turn Across Path: Initial Opposite Directions (Left/Right)



Code "68" identifies the vehicle which turned across the path of another vehicle (code "69") in a Category IV, Configuration J collision, in which the vehicles were initially traveling in opposite directions.

#### 69 Turn Across Path: Initial Opposite Directions (Going Straight)



Enter "69" for a vehicle involved in a collision in which another vehicle (code "68") across its Path, and in which the vehicles were initially traveling in opposite directions.

#### 70 Turn Across Path: Initial Same Directions (Turning Right)



Enter "70" for a vehicle which turned right, across the path of another vehicle (code "71"), when both vehicles were initially traveling in the same direction.

## 71 Turn Across Path: Initial Same Directions (Going Straight)



Enter "71" for a vehicle whose path was crossed by a vehicle turning right (code "70"), when both vehicles were initially traveling in the same direction.

#### 72 Turn Across Path: Initial Same Directions (Turning Left)



Enter "72" for a vehicle which turned left, across the path of another vehicle (code "73"), when both vehicles were initially traveling in the same direction.

#### 73 Turn Across Path: Initial Same Directions (Going Straight)



Enter "73" for a vehicle whose path was crossed by a vehicle turning left (code "72"), when both vehicles were initially traveling in the same direction.

#### 74 Turn Across Path: Specifics Other

EACH: 74 SPECIFICS OTHER

Enter "74" for collisions in which one vehicle turned across another's path, which cannot be described by "68"-"72". Enter "Specifics Other" for accidents involving a driverless in-transport vehicle.

#### 75 Turn Across Path: Specifics Unknown

EACH: 75 SPECIFICS UNKNOWN

Enter "75" when the PAR indicates one vehicle turned across another's path, causing a collision, but no further classification is possible.

#### Configuration K. Turn Into Path

The two vehicles were initially on different trafficways when one attempted to turn into the same trafficway as the other vehicle.

Note, the focus of this configuration is on the turning maneuver from one trafficway to another and not on the vehicles' plane of contact.

#### 76 Turn Into Same Direction (Turning Left)



Enter "76" for a vehicle which turned right, into the path of another vehicle (code "77"), so that both vehicles were traveling in the same direction at the time of the collision.

#### 77 Turn Into Same Direction (Going Straight)



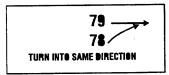
Enter "77" for a vehicle involved in a collision in which another vehicle (code "76") turned right, into its path, so that both vehicles were traveling in the same direction at the time of the collision.

## 78 Turn Into Same Direction (Turning Right)



Enter "78" for a vehicle which turned left, into the path of another vehicle (code "79"), so that both vehicles were traveling in the same direction at the time of the collision.

#### 79 Turn Into Same Direction (Going Straight)



Enter "79" for a vehicle involved in a collision in which another vehicle (code "78") turned left, into its path, so that both vehicles were traveling in the same direction at the time of the collision.

#### 80 Turn Into Opposite Directions (Turning Right)



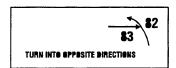
Enter "80" for a vehicle which turned right, into the path of another vehicle (code "81"), so that the vehicles were traveling in opposite directions at the time of the collision.

#### 81 Turn Into Opposite Directions (Going Straight)



Enter "81" for a vehicle involved in a collision in which another vehicle (code "80") turned right, into its path, so that the vehicles were traveling in opposite directions at the time of the collision.

#### 82 Turn Into Opposite Directions (Turning Left)



Enter "82" for a vehicle which turned left, into the path of another vehicle (code "83"), so that the vehicles were traveling in opposite directions at the time of the collision.

Code "82" is used when the driver's vehicle was in the act of making a left turn (e.g., from a driveway, parking lot or intersection). Do not confuse this situation with Configuration Paths. The driver's intended path is the prime concern.

#### 83 Turn Into Opposite Directions (Going Straight)



Enter "83" for a vehicle involved in a collision in which another vehicle (code "82") turned left, into its path, so that the vehicles were traveling in opposite directions at the time of the collision.

#### 84 Turn Into Path: Specifics Other

EACH: 84 SPECIFICS OTHER

Enter "84" for collisions in which one vehicle turned across another's path, which cannot be described by "76"-"83". Enter "Specifics Other" for accidents involving a driverless in-transport vehicle.

#### 85 Turn Into Path: Specifics Unknown

EACH: 85 SPECIFICS UNKNOWN

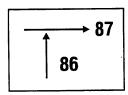
Enter "85" when the PAR indicates one vehicle turned into another's path, causing a collision, but no further classification is possible.

# Category V. Intersecting Paths (Vehicle Damage)

## Configuration L. Straight Paths

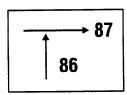
The two vehicles were proceeding (or attempting to proceed) straight ahead.

#### 86 Straight Paths: Striking from the Right



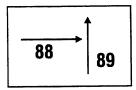
Enter "86" for a vehicle which strikes another vehicle (code "87") from the right when both vehicles were going straight at the time of the collision.

## 87 Straight Paths: Struck on the Right



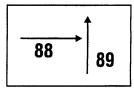
Enter "87" for a vehicle which is struck by another vehicle (code "86") from the right when both vehicles were going straight at the time of the collision.

#### 88 Straight Paths: Striking from the Left



Enter "88" for a vehicle which strikes another vehicle (code "89") from the left when both vehicles were going straight at the time of the collision.

#### 89 Straight Paths: Struck on the Left



Enter "89" for a vehicle which is struck by another vehicle (code "88") from the left when both vehicles were going straight at the time of the collision.

#### 90 Straight Paths: Specifics Other

EACH: 90 SPECIFICS OTHER

Enter "90" for collisions in which two vehicles, both going straight, collide when their paths intersect, which cannot be described by "86"-"89". Enter "Specifics Other" for accidents involving a driverless in-transport vehicle.

#### 91 Straight Paths: Specifics Unknown

EACH: **91** SPECIFICS UNKNOWN

Enter "91" when the PAR indicates two vehicles, both going straight, collided when their paths intersected, but no further classification is possible.

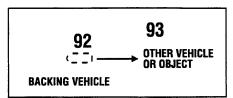
## Category VI. Miscellaneous

#### Configuration M. Backing, Etc.

One of the two vehicles involved was a backing vehicle, regardless of its location on the trafficway or the damage location on the vehicles.

Any accident configuration which cannot be described in Category I. through V. is included here.

#### 92 Backing, Etc.: Backing Vehicle



Enter "92" for a vehicle which backed into another vehicle or object (code "93").

#### 93 Backing, Etc.: Other Vehicle or Object

Enter "93" for a vehicle or object which was backed into by another vehicle (code "92").

### 97 Untripped Rollover

97 UNTRIPPED ROLLOVER

98 OTHER ACCIDENT TYPE

QQ UNKNOWN ACCIDENT TYPE

**NO IMPACT** 

Enter "97" when a rollover occurs which is not the result of a collision but rather vehicle instability (e.g. centrifugal force).

## 98 Backing, Etc.: Other Accident Type

97 UNTRIPPED ROLLOVER

98 OTHER ACCIDENT TYPE

**QQ** UNKNOWN ACCIDENT TYPE

NO IMPACT

Code "98" is used for those events and collisions which do not reasonably fit any of the specified types. This code includes (but is not limited to): rollovers on the road (tripped); U-turns; third or subsequent vehicles involved in an accident; or the second involved vehicle, when the first harmful event involved a vehicle-to-object collision.

#### 99 Backing, Etc.: Unknown Accident Type

97 UNTRIPPED ROLLOVER

98 OTHER ACCIDENT TYPE

QQ UNKNOWN ACCIDENT TYPE

00 NO IMPACT

Code "99" when the accident configuration is unknown.

#### 00 Backing, Etc.: No Impact

97 UNTRIPPED ROLLOVER

98 OTHER ACCIDENT TYPE

QQ UNKNOWN ACCIDENT TYPE

**NO IMPACT** 

Code "00" identifies noncollision events (fire, immersion, etc.). Rollovers on the road should be coded "97" (Untripped Rollover) or "98" (Other Accident Type).

The following accident types require clarification:

**Code "00" (No impact)** identifies noncollision events (fire, immersion, etc.). Rollovers on the road should be coded "98" (Other accident type).

Codes "01" (Right roadside departure, drive off road) and "06" (Left roadside departure, drive off road) are used when the vehicle departed the road under a controlled situation (i.e., the driver was distracted, fell asleep, intentionally departed, etc.).

Codes "02" (Right roadside departure, control/traction loss) and "07" (Left roadside departure, control/traction loss) are used if there is some evidence that the vehicle lost traction or in some other manner "got away" from the driver (i.e., the vehicle spun off the road as a result of surface conditions, oversteer phenomena, or mechanical malfunctions). If doubt exists, code "01" (Right roadside departure, drive off road) or "06" (Left roadside departure, drive off road) respectively.

Codes "03" (Right roadside departure; avoid collision with vehicle, pedestrian, animal) and "08" (Left roadside departure; avoid collision with vehicle, pedestrian, animal) are used when the vehicle departed the road as a result of avoiding something in the road. "Phantom" situations are included here.

Codes "04" (Right roadside departure, specifics other) and "09" (Left roadside departure, specifics other) are used for any other stationary or nonstationary objects if the avoidance characteristics of codes "03" or "08" are present.

Codes "11" (Forward impact, parked vehicle), "12" (Forward impact, stationary object), and "13" (Forward impact, pedestrian/animal) involve an impact with an object which can be located on either side of the road.

Code "12" (Forward impact, stationary object) includes a hole in the road, an overhead object (e.g., overpass) or an object projecting over the road edge (e.g., support column of elevated railway).

Code "13" (Forward impact, pedestrian/animal) is used when a pedestrian, nonmotorist, or animal is involved with the first harmful event. Vehicle plane of contact is not a consideration.

Code "15" (Forward impact, specifics other) is used for impacted (striking or struck) trains and nonstationary objects on the road.

Codes "44" (Sideswipe/Angle, straight ahead on left), "45" (Sideswipe/Angle, straight ahead on left/right), "46" (Sideswipe/Angle, changing lanes to the right), and "47" (Sideswipe/Angle, changing lanes to the left) identify relative vehicle positions (left versus right) and lane of travel intentions (straight ahead versus changing lanes).

From these four codes, four combinations are permitted. They are:

- "44" and "45".
- "46" and "45",
- "45" and "47", and
- "46" and "47".

When used as a combination these codes refer to a sideswipe or angle collision which involved a vehicle to the left of a vehicle to the right where:

- neither vehicle (codes "44" and "45") intended to change its lane; the vehicle on the left (code "46") was changing lanes to the right, and the vehicle on the right (code "45") was not intending to change its lane;
- the vehicle on the left (code "45") was not intending to change its lane, and the vehicle on the right (code "47") was changing lanes to the left; and
- the vehicle on the left (code "46") was changing lanes to the right, and the vehicle on the right (code "47") was changing lanes to the left.

#### In addition, when:

- the right sides of the two vehicles impact following a 180 degree rotation of the vehicle on the right, or
- the left sides of the two vehicles impact following a 180 degree rotation of the vehicle on the left; select the appropriate combination ("44"-"45", "46"-"45", "45"-"47", or "46"-"47") depending upon:
- their positions (i.e., left versus right) and
- the intended lane of travel (straight ahead versus changing lanes) of their drivers.

Code "48" (Sideswipe/Angle, specifics other) is used if one vehicle was behind the other prior to their Category II, Configuration F collision. For example, use this code when two vehicles are on the same trafficway and going the same direction, and one loses control and is struck in the side by the front of the other vehicle. However, if one vehicle rotates such that the impact is front to front, then use code "98" (Other accident type).

Code "64" (Sideswipe/Angle, lateral move—infringing vehicle) identifies the vehicle which infringed upon the other (code "65") in a Category III, Configuration I collision.

Codes "68" through "85" (Turn Across Path and Turn Into Path) are used in Configurations J and K where the vehicle's action is the controlling factor, and the plane of contact is irrelevant.

Code "82" (Left Turn Into Opposite Direction) is used when the driver's vehicle was in the act of making a left turn (e.g., from a driveway, parking lot or intersection). Do not confuse this situation with Configuration L. Straight Paths. The driver's intended path is the prime concern.

Codes "86" through "89" (Straight Paths) must not be confused with accident types in Configuration K. Turn Into Path. For these codes the vehicles are proceeding (or attempting to proceed) straight ahead, usually at a junction.

**Code "97" (Untripped Rollover)** is used when a rollover occurs which is not the result of a collision but rather vehicle instability (e.g. centrifugal force).

Code "98" (Other Accident Type) is used for those events and collisions which do not reasonably fit any of the specified types. This code includes (but is not limited to): rollovers on the road (tripped); U-turns; third or subsequent vehicles involved in an accident; or the second involved vehicle when the first harmful event involved a vehicle-to-object collision.

# **Consistency Check**

**V23** 

| AV020 |  | OLVED in the FHE with the ACCIDENT                     |
|-------|--|--|
| AV070 | FIRST HARMFUL EVENT (A6) equals 26   | ACCIDENT TYPE (V23) should equal 01-11, 92, 98, or 99. |
| AV071 | FIRST HARMFUL EVENT (A6) equals 21, 22, or 24, and MOVEMENT PRIOR TO CRITICAL EVENT (V21) is not equal to 13 | ACCIDENT TYPE (V23) should equal 13.                   |
| AV072 | FIRST HARMFUL EVENT (A6) equals 28 or 58, and RELATION TO ROADWAY (A10) equals 1                             | ACCIDENT TYPE (V23) should equal 12.                   |
| AV097 | RELATION TO ROADWAY (A10) equals 4 and NUMBER OF MOTOR VEHICLES (A3) equals 01                               | ACCIDENT TYPE (V23) should equal 06-10, 98, 99.        |
| AV132 | FIRST HARMFUL EVENT (A6) equals 02, 03, 06, 08, or 09  | at least one ACCIDENT TYPE (V23) must equal 00.        |
| AV133 | MANNER OF COLLISION (A7) equals 3  | at least one ACCIDENT TYPE (V23) must equal 92 or 98.  |
| AV203 | MANNER OF COLLISION (A7) equals 5  | ACCIDENT TYPE (V23) should not equal 20-33.            |
| AV204 | MANNER OF COLLISION (A7) equals 5  | ACCIDENT TYPE (V23) should equal 44-49, 98, or 99.     |
| AV205 | MANNER OF COLLISION (A7) equals 6  | ACCIDENT TYPE (V23) should not equal 50-53.            |
| AV206 | MANNER OF COLLISION (A7) equals 6  | ACCIDENT TYPE (V23) should equal 64-67, 98, or 99.     |
| AV215 | FIRST HARMFUL EVENT (A6) equals 01-10  | ACCIDENT TYPE (V23) must not equal 20-91.              |

|       | IF   | THEN   |
|-------|--|--|
| AV222 | FIRST HARMFUL EVENT (A6)<br>equals 05 and RELATION TO<br>ROADWAY (A10) equals I                          | ACCIDENT TYPE (V23) should equal 98.                       |
| AV223 | FIRST HARMFUL EVENT (A6) equals 01   | ACCIDENT TYPE (V23) should equal 01-10, 97, 98, or 99.     |
| AV225 | MANNER OF COLLISION (A7) equals 2  | ACCIDENT TYPE (V23) must not equal 64-67.                  |
| AV226 | MANNER OF COLLISION (A7) equals 4  | ACCIDENT TYPE (V23) must not equal 20-43 or 50-53.         |
| AV243 | MANNER OF COLLISION (A7) equals 1  | ACCIDENT TYPE (V23) should not equal 44-49.                |
| VA014 | ACCIDENT TYPE (V23) equals 01-16   | NUMBER OF MOTOR VEHICLES (A3) should equal 1.              |
| VA015 | ACCIDENT TYPE (V23) equals 20-91   | NUMBER OF MOTOR VEHICLES (A3) must be greater than 1.      |
| VA081 | ACCIDENT TYPE (V23) equals 13  | FIRST HARMFUL EVENT (A6) must equal 21, 22, 24, or 27.     |
| VA082 | ACCIDENT TYPE (V23) equals 68-91   | RELATION TO JUNCTION (A9) should not equal 00.             |
| VA086 | ACCIDENT TYPE (V23) equals 01-16 for one vehicle and the remaining vehicles have a value of 98 for (V23) | FIRST HARMFUL EVENT (A6) must not equal 25 or 99.          |
| VA087 | ACCIDENT TYPE (V23) equals 99 for one vehicle and the remaining vehicles have a value of 98 for (V23)    | FIRST HARMFUL EVENT (A6) should equal 99.                  |
| VA094 | ACCIDENT TYPE (V23) equals 01-11, 14   | RELATION TO ROADWAY (A10) should not equal 1.              |
| VA120 | Only ACCIDENT TYPE CODES 01-16 accident involves a single vehicle.                                       | , 92, 97, 98, 99, 00 can be used when                      |
| VA137 | ACCIDENT TYPE (V23) equals 00  | FIRST HARMFUL EVENT (A6) must equal 02, 03, 06, 08, or 09. |

|          |       | !F  | THEN  |
|----------|-------|---|---|
|          | VA138 | ACCIDENT TYPE (V23) equals 06-10 and TRAFFICWAY FLOW (A11) equals 2 | RELATION TO ROADWAY (A10) should equal 4.                               |
|          | VA139 | ACCIDENT TYPE (V23) equals 14                                       | RELATION TO JUNCTION (A9) must not equal 01 or 11.                      |
|          | VA140 | ACCIDENT TYPE (V23) equals 14                                       | RELATION TO JUNCTION (A9) should equal 00, 02, 10 or 12.                |
|          | VA211 | ACCIDENT TYPE (V23) equals 97                                       | RELATION TO ROADWAY (A10) should equal 1.                               |
| <b>K</b> | VA219 | ACCIDENT TYPE (V23) equals<br>20-91                                 | FIRST HARMFUL EVENT (A6) must equal 25.                                 |
|          | VA227 | ACCIDENT TYPE (V23) equals 20-<br>43 or 50-53                       | MANNER OF COLLISION (A7) must not equal 4.                              |
|          | VA228 | ACCIDENT TYPE (V23) equals 64-67                                    | MANNER OF COLLISION (A7) must not equal 2.                              |
|          | VV051 | ACCIDENT TYPE (V23) equals 21, 22, or 23                            | TRAVEL SPEED (V11) must equal 00.                                       |
|          | VV052 | ACCIDENT TYPE (V23) equals 21, 22, or 23                            | MOVEMENT PRIOR TO CRITICAL EVENT (V21) must equal 04, 06, 18, 98 or 99. |
|          | VV053 | ACCIDENT TYPE (V23) equals 26, 30, 68, 72, 76, or 82                | MOVEMENT PRIOR TO CRITICAL EVENT (V21) should equal 11 or 98.           |
|          | VV054 | ACCIDENT TYPE (V23) equals 27, 31, 70, 78, or 80                    | MOVEMENT PRIOR TO CRITICAL EVENT (V21) should equal 10 or 98.           |
|          | VV055 | ACCIDENT TYPE (V23) equals 29, 30, or 31                            | MOVEMENT PRIOR TO CRITICAL EVENT (V21) should equal 02.                 |
|          | VV063 | MOVEMENT PRIOR TO<br>CRITICAL EVENT (V21) equals 12                 | ACCIDENT TYPE (V23) should equal 98.                                    |
|          | VV064 | VEHICLE ROLE (V22) equals 1 and ACCIDENT TYPE (V23) equals 92       | INITIAL POINT OF IMPACT (V24) must not equal 01.                        |

| VV065 | IF ACCIDENT TYPE (V23) equals 20, 24, 28, 34, 36, 38, 40, 50-54, 56, 58, or 60   | THEN INITIAL POINT OF IMPACT (V24) must equal 01.   |
|-------|--|---|
| VV066 | ACCIDENT TYPE (V23) equals 21, 22, 23, 25, 26, 27, 29, 30, 31, 35, 37, 39, or 41 | INITIAL POINT OF IMPACT (V24) must equal 04.  |
| VV067 | ACCIDENT TYPE (V23) equals 86, 88  | VEHICLE ROLE (V22) must not equal 2.  |
| VV068 | ACCIDENT TYPE (V23) equals 87, 89  | VEHICLE ROLE (V22) must not equal 1.  |
| VV070 | ACCIDENT TYPE (V23) equals 46 or 47  | MOVEMENT PRIOR TO CRITICAL EVENT (V21) should equal 05, 16, or 17.                                  |
| VV071 | ACCIDENT TYPE (V23) equals 92  | MOVEMENT PRIOR TO CRITICAL EVENT (V21) should equal 07, 08, 13, 98, or 99.                          |
| VV072 | ACCIDENT TYPE (V23) equals 50, 51, 52, or 53                                     | VEHICLE ROLE (V22) should equal 1.  |
| VV075 | ACCIDENT TYPE (V23) equals 01-12, 14, 20, 24, 28, 34, 36, 38, 40                 | VEHICLE ROLE (V22) must not equal 2.  |
| VV078 | ACCIDENT TYPE (V23) equals 25, 26, 27, 29, 30, or 31                             | MOVEMENT PRIOR TO CRITICAL EVENT (V21) should not equal 04 or 06.                                   |
| VV079 | ACCIDENT TYPE (V23) equals 21, 22, 23, 25, 26, 27, 29, 30, or 31                 | VEHICLE ROLE (V22) must not equal 1.  |
| VV082 | ACCIDENT TYPE (V23) equals 00  | VEHICLE ROLE (V22) must equal 0.  |
| VV094 | MOVEMENT PRIOR TO<br>CRITICAL EVENT (V21) equals 10                              | ACCIDENT TYPE (V23) must not equal 44-67, 68, 69, 71, 72, 73, 76, 77, 79, 81, 82, 83, 86-91, or 92. |
| VV095 | MOVEMENT PRIOR TO<br>CRITICAL EVENT (V21) equals 11                              | ACCIDENT TYPE (V23) must not equal 44-67, 69, 70, 71, 73, 77, 78, 79, 80, 81, 83, 86-91, or 92.     |

|       | IF  | THEN  |
|-------|---|---|
| VV096 | MOVEMENT PRIOR TO<br>CRITICAL EVENT (V21) equals 13   | ACCIDENT TYPE (V23) should equal 92 or 98.  |
| VV097 | ACCIDENT TYPE (V23) equals 87   | INITIAL POINT OF IMPACT (V24) should equal 02.  |
| VV098 | ACCIDENT TYPE (V23) equals 89   | INITIAL POINT OF IMPACT (V24) should equal 03.  |
| VV099 | ACCIDENT TYPE (V23) equals 87   | INITIAL POINT OF IMPACT (V24) must not equal 03.  |
| VV100 | ACCIDENT TYPE (V23) equals 89   | INITIAL POINT OF IMPACT (V24) must not equal 02.  |
| VV104 | ACCIDENT TYPE (V23) equals 68, and VEHICLE ROLE (V22) equals 2  | INITIAL POINT OF IMPACT (V24) should not equal 03.  |
| VV106 | ACCIDENT TYPE (V23) equals 50, 51, 52, or 53, and MOVEMENT PRIOR TO CRITICAL EVENT (V21) equals 01, 02, 03, 05, 15, 16, or 17 | VEHICLE ROLE (V22) must equal 1 or 3.   |
| VV106 | ACCIDENT TYPE (V23) equals 50, 51, 52, or 53, and MOVEMENT PRIOR TO CRITICAL EVENT (V21) equals 01, 02, 03, 05, 15, 16, or 17 | VEHICLE ROLE (V22) must equal 1 or 3.   |
| VV121 | ACCIDENT TYPE (V23) equals 97   | ROLLOVER TYPE (V30) must equal 10.  |
| VV122 | ACCIDENT TYPE (V23) equals 03, 08, 38, 40, 58, or 60  | CORRECTIVE ACTION ATTEMPTED (V27) must not equal 00.  |
| VV175 | ACCIDENT TYPE (V23) equals<br>20-49 and CORRECTIVE ACTION<br>ATTEMPTED (V27) equals 00  | CRITICAL EVENT (V26) should not equal 100-199, 230, 300, 411-430, 441-459, 530, 600, 711-730, 741-759, 800-859. |

|       | iF  | THEN   |
|-------|---|--|
| VV176 | ACCIDENT TYPE (V23) equals 50-67 and CORRECTIVE ACTION ATTEMPTED (V27) equals 00      | CRITICAL EVENT (V26) should not equal 100, 101, 102, 199, 210, 215, 220, 310, 320, 410, 411, 440, 441, 510, 515, 520, 610, 620, 710, 711, 740, 741, 800-859. |
| VV182 | CRITICAL EVENT (V26) equals 102 and CORRECTIVE ACTION ATTEMPTED (V27) equals 00       | ACCIDENT TYPE (V29) must equal 14.   |
| VV191 | DRIVER PRESENCE (D1) equals 0   | ACCIDENT TYPE (V23) must equal 00, 04, 09, 15, 32, 42, 48, 52, 62, 66, 74, 84, 90, or 98.  |
| VV195 | ACCIDENT TYPE (V23) equals 03, 08, 34, 36, 38, 40, 54, 56, 58, or 60                  | DRIVER MANEUVERED TO AVOID (D6) must not equal 00.   |
| VV226 | ROLLOVER TYPE (V30) equals 10   | ACCIDENT TYPE (V23) must not equal 98.   |
| VV237 | CRITICAL EVENT (V26) equals 841<br>and CORRECTIVE ACTION<br>ATTEMPTED (V27) equals 00 | ACCIDENT TYPE (V23) should equal 15.   |
| VV238 | CRITICAL EVENT (V26) equals 840<br>and CORRECTIVE ACTION<br>ATTEMPTED (V27) equals 00 | ACCIDENT TYPE (V23) should equal 12.   |
| VV239 | CRITICAL EVENT (V26) equals 000   | ACCIDENT TYPE (V23) should equal 00.   |
| VV240 | ACCIDENT TYPE (V23) equals 00   | CRITICAL EVENT (V26) should equal 000.   |
| VV242 | PRECRASH CONTROL (V28) equals 01  | ACCIDENT TYPE (V23) must not equal 02, 07, 34, 36, 54, or 56.  |
| VV243 | ACCIDENT TYPE (V23) equals 46 or 47   | MOVEMENT PRIOR TO CRITICAL EVENT (V21) must not equal 01.  |
| VV245 | ACCIDENT TYPE (V23) equals 01 or 06   | PRECRASH CONTROL (V28) must not equal 02, 03, 04, or 98.   |
| VV247 | ROLLOVER TYPE (V30) equals 10   | ACCIDENT TYPE (V23) should equal 01-10, 14, 97, or 99.   |

# **V24** Initial Point of Impact

## **Element Values**

- 00 Non-Collision
- 01 Front
- 02 Right Side
- 03 Left Side
- 04 Back
- 05 Top
- 06 Undercarriage
- 11 Front Right Corner
- 12 Front Left Corner
- 13 Back Right Corner
- 14 Back Left Corner
- 99 Initial Point of Impact Unknown

# Remarks

Code the first impact point that produced property damage or personal injury (regardless of FIRST or MOST HARMFUL EVENT).

# **Consistency Check**

| AV069 | FIRST HARMFUL EVENT (A6) equals 01-09 and MOST HARMFUL EVENT (V20) equals 01-09  | THEN INITIAL POINT OF IMPACT (V24) must equal 00.  |
|-------|--|--|
| AV073 | MANNER OF COLLISION (A7) equals 2  | INITIAL POINT OF IMPACT (V24) must equal 01 for two vehicles.  |
| AV074 | MANNER OF COLLISION (A7) equals 3  | INITIAL POINT OF IMPACT (V24) must equal 04 for two vehicles.  |
| AV075 | MANNER OF COLLISION (A7) equals 1  | at least one vehicle must have INITIAL POINT OF IMPACT (V24) equal to 01.                            |
| AV076 | MANNER OF COLLISION (A7) equals 1  | at least one vehicle must have INITIAL POINT OF IMPACT (V24) equal to 04.                            |
| VA198 | INITIAL POINT OF IMPACT (V24) equals 00  | FIRST HARMFUL EVENT (A6) should equal 01-10.   |
| VV057 | INITIAL POINT OF IMPACT (V24) equals 11, 12, 13, or 14                           | DAMAGE AREAS (V25) must have at least two values other than 0, unless the first character is 7 or 0. |
| VV064 | VEHICLE ROLE (V22) equals 1 and ACCIDENT TYPE (V23) equals 92                    | INITIAL POINT OF IMPACT (V24) must not equal 01.   |
| VV065 | ACCIDENT TYPE (V23) equals 20, 24, 28, 34, 36, 38, 40, 50-54, 56, 58, or 60      | INITIAL POINT OF IMPACT (V24) must equal 01.   |
| VV066 | ACCIDENT TYPE (V23) equals 21, 22, 23, 25, 26, 27, 29, 30, 31, 35, 37, 39, or 41 | INITIAL POINT OF IMPACT (V24) must equal 04.   |
| VV097 | ACCIDENT TYPE (V23) equals 87  | INITIAL POINT OF IMPACT (V24) should equal 02.   |
| VV098 | ACCIDENT TYPE (V23) equals 89  | INITIAL POINT OF IMPACT (V24) should equal 03.   |

**V24** 

|          |       | IF  | THEN   |
|----------|-------|---|--|
|          | VV099 | ACCIDENT TYPE (V23) equals 87   | INITIAL POINT OF IMPACT (V24) must not equal 03.   |
|          | VV100 | ACCIDENT TYPE (V23) equals 89   | INITIAL POINT OF IMPACT (V24) must not equal 02.   |
|          | VV104 | ACCIDENT TYPE (V23) equals 68, and VEHICLE ROLE (V22) equals 2                    | INITIAL POINT OF IMPACT (V24) should not equal 03. |
|          | VV177 | INITIAL POINT OF IMPACT (V24) equals 01 and TRAVEL SPEED (V11) is greater than 00 | VEHICLE ROLE (V22) should not equal 2.             |
|          | VV178 | INITIAL POINT OF IMPACT (V24) equals 11   | DAMAGE AREAS (V25) should include values 1 and 2.  |
|          | VV179 | INITIAL POINT OF IMPACT (V24) equals 12   | DAMAGE AREAS (V25) should include values 1 and 3.  |
|          | VV180 | INITIAL POINT OF IMPACT (V24) equals 13   | DAMAGE AREAS (V25) should include values 2 and 4.  |
|          | VV181 | INITIAL POINT OF IMPACT (V24) equals 14   | DAMAGE AREAS (V25) should include values 3 and 4.  |
| <b>F</b> | VV224 | CRITICAL EVENT (V26) equals 210, <i>215</i> , or 520                              | INITIAL POINT OF IMPACT (V24) should not equal 01. |
| <b>K</b> | VV225 | CRITICAL EVENT (V26) equals 220, 510, <i>515</i>                                  | INITIAL POINT OF IMPACT (V24) should not equal 04. |

# V25 Damage Areas

#### **Element Values**

- 0 No Damage
- 1 Front
- 2 Right Side
- 3 Left Side
- 4 Back
- 5 Top
- 6 Undercarriage
- 7 All Areas Damaged
- 9 Damage Areas Unknown

#### Remarks

This variable reports this vehicle's specific areas damaged due to impact. The totality of the damage is used when determining the specific areas.

"Vehicle" as used in this variable is the same as V05, Body Type, **plus** all trailers connected by means of a fixed linkage at the time of impact. The six planes (front, right side, left side, back, top, undercarriage) are measured with respect to the entire vehicle (capsule). In contrast, any trailer disconnected prior to impact is treated as an object.

A five character field is used to indicate up to five specific areas of damage on the vehicle. The numbers used to represent the areas damaged should be entered in ascending numerical order and the remaining blanks filled with 0's. For example:

A single vehicle accident involving a head-on impact with a brick wall results in damage to the vehicles left side, front and right side. The correct coding for this is  $\underline{1} \underline{2} \underline{3} \underline{0} \underline{0}$ . If this same impact had resulted in damage to the front and left side, only, the correct coding would be  $\underline{1} \underline{3} \underline{0} \underline{0} \underline{0}$ .

Enter "00000" (No Damage) when the vehicle sustains no impact but is part of the accident due to a non-collision event such as: fire or explosion, immersion, gas inhalation, an occupant's fall from the vehicle, an injured occupant without an external impact, or other nonimpacts except most jackknife situations.

Enter "1" (Front), "2" (Right Side), "3" (Left Side), "4" (Back), "5" (Top), or "6" (Undercarriage) whenever the PAR indicates that one or more (but not all) planes were damaged in the accident.

Enter "70000" (All Areas Damaged) whenever the PAR indicates that all planes received damage in the accident. This includes both the top and undercarriage planes. In order for all damage areas to be involved, the vehicle will usually have to have rolled over or sustained numerous impacts.

Enter "9" (Damage Areas Unknown) whenever the PAR does not indicate which area or areas received damage or when the information on the PAR is confusing or inadequate for the purposes of this determination. When some, or all, of the damage areas are unknown apply the following guidelines:

- Enter '99999' when the vehicle is damaged but no specific area is known.
- When some damaged areas are known but uncertainty exists regarding possible damage to other areas, code all known damage areas and fill the remaining spaces with 9's (i.e. 1 2 9 9 9).

#### **Summary Of Steps To Determine Code:**

- 1st Identify all known damaged areas
- 2nd Determine if any other areas may have been damaged but are not known with certainty because the PAR information is incomplete, contradictory etc.
- 3rd List all known areas in ascending numerical order.
- 4th If no unknown areas exist fill the remaining spaces with 0's. If some areas are unknown fill the remaining spaces with 9's.
- 5th If all areas are unknown enter '99999'.

# **Consistency Check**

|   |        |   | V25  |
|---|--------|---|--|
|   |        | IF  | THEN   |
| V | V057   | INITIAL POINT OF IMPACT (V24) equals 11, 12, 13, or 14                                  | DAMAGE AREAS (V25) must have at least two values other than 0, unless the first character is 7 or 0. |
| V | V058   | DAMAGE AREAS (V25) equals 70000   | MANNER OF LEAVING SCENE (V19) should equal 2 or 3.   |
| V | V074   | MANNER OF LEAVING SCENE (V19) equals 2  | DAMAGE AREAS (V25) should be greater than 00000.   |
| V | · V080 | DAMAGE AREAS (V25) equals<br>00000 and MOST HARMFUL<br>EVENT (V20) does not equal 01-10 | MANNER OF LEAVING SCENE (V19) should not equal 2.  |
| V | V081   | any character coded for DAMAGE<br>AREAS (V25) equals 5                                  | MOST HARMFUL EVENT (V20) should equal 01, 08, 09, or 10.   |
| V | V088   | DAMAGE SEVERITY (V18) equals 0  | DAMAGE AREAS (V25) must equal 00000.   |
| V | V138   | ROLLOVER TYPE (V30) is not equal to 00  | DAMAGE AREAS (V25) should have more than one value other than 0.                                     |
| V | V178   | INITIAL POINT OF IMPACT (V24) equals 11   | DAMAGE AREAS (V25) should include values 1 and 2.  |

|       | IF   | THEN  |
|-------|--|---|
| VV179 | INITIAL POINT OF IMPACT (V24) equals 12                                  | DAMAGE AREAS (V25) should include values 1 and 3. |
| VV180 | INITIAL POINT OF IMPACT (V24) equals 13                                  | DAMAGE AREAS (V25) should include values 2 and 4. |
| VV181 | INITIAL POINT OF IMPACT (V24) equals 14                                  | DAMAGE AREAS (V25) should include values 3 and 4. |
| VV222 | DAMAGE AREAS (V25) equals 00000 and VEHICLE ROLE (V22) is not equal to 0 | DAMAGE SEVERITY (V18) must equal 0.               |

# **Precrash Data Overview**

## Introduction

Coding of the precrash variables is completed for each of the in-transport vehicles in the accident. This means that the entire accident is first coded from the perspective of one vehicle, then coded from the perspective of a second vehicle, if any. The precrash variables are:

- V21 Movement Prior To Critical Event (Precrash 1)
- V26 Critical Event (Precrash 2)
- V27 Corrective Action Attempted (Precrash 3)
- V28 Precrash Vehicle Control (Precrash 4), and
- V29 Precrash Location (Precrash 5).

The precrash variables are designed to identify the following:

- what was this vehicle doing just prior to the critical precrash event,
- what made this vehicle's situation critical,
- what was the corrective action, if any, to this critical situation, and



what was the *location* and *stability* of the vehicle just prior to impact?

The most important determination that must be made for each in-transport vehicle is: what was this vehicle's Critical Event, V26 (i.e., what action by this vehicle, another vehicle, person, animal, or nonfixed object was critical to this vehicle's accident?). Once this determination is made, then determine the vehicle's response to the action which made this vehicle's involvement critical.

Corrective Action Attempted, V27, is defined as movements/actions taken by the driver's vehicle, within a critical crash envelope, in response to a Critical Event, V26.

Do not consider who was at fault when determining precrash data. Many accident scenarios will suggest fault, but this is considered coincidental rather than by design.

### **Precrash Data Overview - Critical Crash Envelope**

The critical crash envelope begins at the point where:

- the driver recognizes an impending danger (e.g., deer runs into the roadway), or
- the vehicle is in an imminent path of collision with another vehicle, pedestrian, pedalcyclist, other nonmotorist, object, or animal.

The critical crash envelope ends when:

- (1) (a) the driver has made a successful corrective action;
  - (b) has full steering control, and;
  - (c) the vehicle is tracking; or
- (2) the driver's vehicle impacts another vehicle, pedestrian, pedalcyclist, other non-motorist, object, or animal.

## Simple Single Critical Crash Envelope

Most accidents involve only a single critical crash envelope in which the object contacted is captured under the Critical Event, V26 (e.g., A vehicle is traveling straight on a roadway; a deer runs into the roadway and is struck by the vehicle.). This scenario and similar ones are very straight forward and will not present many coding problems.

## **Complex Single Critical Crash Envelope**

However, some single critical crash envelopes are more complex.

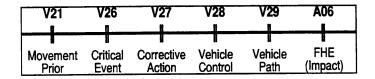
**Example A**: A driver avoids one obstacle and immediately impacts another vehicle, person, object, or animal. Because **immediate** is defined as not having an opportunity or sufficient time to take any additional corrective actions, the Critical Event, V26, is coded to the vehicle, person, object, or animal which the driver successfully avoided instead of the vehicle's first harmful event (i.e., its impact); see examples 4 and 7 below.

**Example B**: The driver avoids an obstacle only to (a) lose steering control and/or (b) have the vehicle stop tracking, and the vehicle subsequently impacts another vehicle, person, object, or animal. Regardless of whether the driver attempted to regain steering control; cause the vehicle to resume a tracking posture; or avoid the impacted vehicle, person, object, or animal; the Critical Event, V26, is similarly coded to the vehicle, person, object, or animal which the driver successfully avoided because the driver's critical crash envelope was never stabilized.

In both examples above, the Corrective Action Attempted, V27, records the successful action taken to avoid the Critical Event, V26.

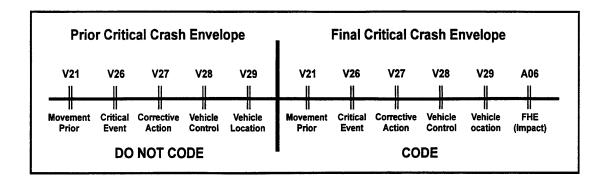
Vehicles that are not involved in an impact with another vehicle, person, object, or animal in the sequence of accident events that defines the accident are not included in the General Estimates System; and therefore, automated, encoded data are not collected for these vehicles.

The coding order for a single critical crash envelope is illustrated below in Figure V-2: Typical Order of a Single Critical Crash Envelope.



#### Multiple Critical Crash Envelopes

When accidents involve multiple critical crash envelopes, code only the final critical crash envelope. In this situation, encode the variable, Movement Prior To Critical Event (V21), using code "18" (Successful corrective action to a previous critical event). The final critical crash envelope is the one that resulted in this vehicle's first impact as shown in Figure V-3: Typical Order of Multiple Critical Crash Envelopes, below.



When there is doubt as to whether this vehicle had experienced multiple critical crash envelopes, code the Critical Event, V26, to the vehicle, person, object, or animal which the driver successfully avoided. See Complex Single Critical Crash Envelope examples A and B above.

The pages that follow contain, first, a flowchart illustrating the proper method and protocol for determining the precrash variables, and second, eight examples of various accident event sequences which contain one or more critical crash envelopes.

#### **Method Protocol**

- 1. Determine V26 (Critical Event). What action by this vehicle, another vehicle, person, animal, or object was critical to this driver becoming involved in the accident (i.e., use the "BUT FOR" test)?
  - A. Determine which of the four major categories (I. IV.) this action falls under.
    - I. Was the Critical Event initiated by this vehicle?
    - II. Was the Critical Event initiated by another vehicle?
    - III. Was the Critical Event initiated by a pedestrian, pedalcyclist, other nonmotorist, animal or object?
    - IV. Did the Critical Event not fit into the first three categories or were more than two vehicles involved in the accident?
  - B. Review, in order, each subcategory under the chosen major category to which one applies.
  - C. Select the appropriate code from those listed under the selected subcategory.
- 2. Determine V27 (Corrective Action Attempted). What does the PAR indicate that the driver of this vehicle attempted to do in response to the critical event?



- 3. Determine V28 (Precrash Vehicle Control) and V29 (Precrash Location).
- 4. Determine V21 (Movement Prior to Critical Event).

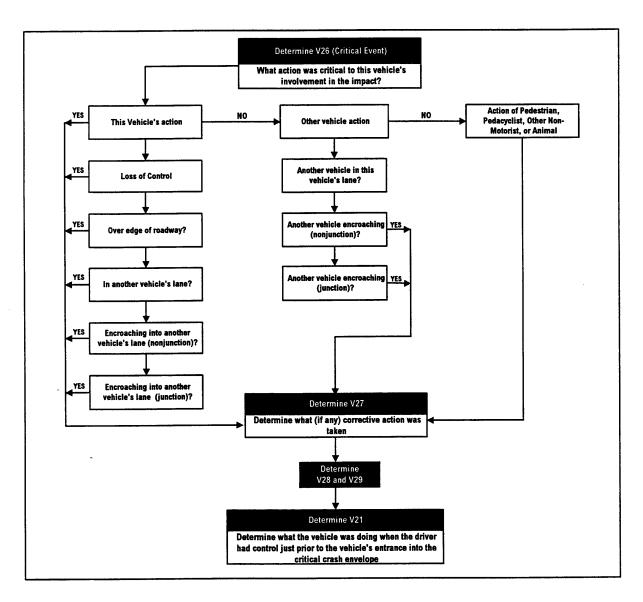


Figure V-4: Method and Protocol for Determining Precrash Variables

#### FOR EXAMPLE:

"But for" Vehicle # going left-of-center, this vehicle would not have been involved in this accident.

"But for" having entered into the intersection, this vehicle would not have been involved in this accident.

#### 

#### Precrash General Rules

- 1. V27, Corrective Action Attempted, assesses what the vehicle did rather than what the driver stated he/she tried to do.
- 2. A traffic control signal/sign can never make the situation critical when coding V26 (Critical Event).

- 3. If control is lost due to driver illness such as heart attack, diabetic coma, etc., then V26 (Critical Event) should be coded "099, Loss of Control Due To Other or Unknown Reason".
- 4. In coding V26, (Critical Event), the loss of control must have occurred prior to the driver doing any corrective action. If the driver attempts a action (i.e. brakes, steers, etc.) as a result of the driver's perception of a vehicle, object, pedestrian, or nonmotorist, then code "998, Other Action" as what made it critical. If the vehicle is in a yaw (sliding in rotation, usually leaving skid marks on the pavement) prior to the driver taking an avoidance action, then "loss of control" is what made it critical (e.g., hydroplaning, etc.) and codes "010-099" should be used.
- 5. If in coding V26 (Critical Event) it can not be determined which driver had the right of way at a controlled intersection, then use the following as a guideline
  - If the junction is controlled by a 3-way/4-way stop sign or is uncontrolled, then use the common rule that the vehicle on the right has the right of way for determining encroachment.
  - If the junction is controlled by an on-colors traffic control device, and both drivers claim a green light, then code both vehicles as initiating the critical event. V26 (Critical Event) equals 410-430 for both vehicles.
- 6. In coding V26 (Critical Event) for vehicles executing a left turn with the right of way, use code "712" (Other Vehicle Entering Intersection Turning Across Path.)
- 7. In coding V26 (Critical Event), "fixed" objects cannot be in the roadway.
- 8. If there are no skid marks present at the scene and the vehicle did not rotate 30 degrees or more (either clockwise or counterclockwise), the code V28 (Precrash Vehicle Control) as "01, Vehicle Control Maintained".

Vehicle 2 is northbound and passing through an intersection on a roadway without traffic control. Vehicle 1 is eastbound on a crossing roadway with a stop sign but did not stop or slow down. Vehicle 1 crashes into the side of vehicle 2. Vehicle 2 did not see vehicle 1 coming. Vehicle 1 braked (leaving skid marks) just prior to impact, without any steering.

In this example, vehicle 1 has one critical crash envelope (V1 CCE)

|          | Vehicle 1  | Vehicle 2  |
|----------|--|--|
|          | V21 (01) Going Straight                                | (01) Going Straight                                |
|          | V26 (411) Entering Intersection - straight across path | (711) Entering Intersection - straight across path |
|          | V27 (01) Braked/Slowed                                 | (00) No Corrective Action                          |
|          | V28 (04) Vehicle Skidded Longitudinally                | (01) Vehicle Control Maintained                    |
| <b>F</b> | V29 (01) Vehicle Stayed in Travel Lane                 | (01) Vehicle Stayed in Travel Lane                 |

which begins at the point where driver 1 recognizes that vehicle 1 is in an imminent collision path with vehicle 2. Vehicle 1's critical crash envelope ends at the point of impact with vehicle 2.

Vehicle 2 has one **critical crash envelope** (V2 CCE). Although the driver of vehicle 2 did not recognize the danger, vehicle 2's critical crash envelope begins at the point where vehicle 2 is in an imminent path of collision with vehicle 1. Vehicle 2's critical crash envelope ends at the point of impact with vehicle 1.

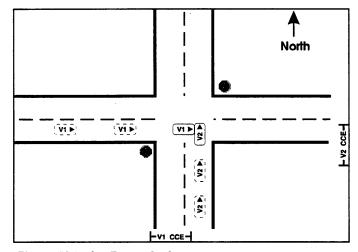


Figure V-5: for Example 1

Vehicle 1 and vehicle 2 are traveling in opposite directions on the same roadway. The driver of vehicle 1 falls asleep and crosses over the center line into the travel lane of vehicle 2. Vehicle 2 attempted to avoid vehicle 1 by steering right onto the shoulder and accelerating. Vehicle 1 impacted vehicle 2 in the side.

| Vehicle 1                              | Vehicle 2                          |
|--|------------------------------------|
| V21 (01) Going Straight                | (01) Going Straight                |
| V26 (230) In Lane - opposite direction | (530) In lane - opposite direction |
| V27 (00) No Corrective Action          | (14) Accelerated and steered right |
| V28 (98) Other or Unknown Type of      | (01) Vehicle Control Maintained    |
| Control was Lost                       |                                    |
| V29 (02) Vehicle Stayed in Travel Lane | (01) Vehicle departed roadway      |

In this example, vehicle 1 has one critical crash envelope (V1 CCE) which begins at the point where vehicle 1 crosses over the lane line and ends at the point of impact with vehicle 2.

Vehicle 2 has one **critical crash envelope** (V2 CCE) which begins at the point where driver 2 recognizes vehicle 1 encroaching into his/her travel lane. Vehicle 2's critical crash envelope ends at the point of impact with vehicle 1.

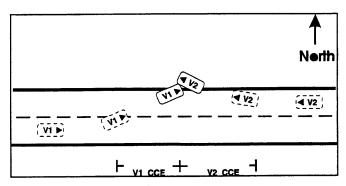


Figure V-6: for Example 2

Vehicle 1 is eastbound and passing through an intersection on a roadway without traffic control. The noncontact vehicle (NCV) is northbound and stopped at the intersection on a crossing roadway with a stop sign. The noncontact vehicle turns right into the travel path of Vehicle 1. Vehicle 1 braked (without lockup) and steered left to avoid the noncontact vehicle. The driver of vehicle 1 successfully avoided the noncontact vehicle, maintained full control of vehicle 1, but consequently put vehicle 1 in the travel path of vehicle 2. Vehicle 2 attempted to avoid vehicle 1 by steering right and braking (with lockup). Vehicle 1 attempted to avoid vehicle 2 by steering right and braking (with lockup). Vehicle 1 and vehicle 2 crashed front left corner to front left corner.

In this example, vehicle 1 has two critical crash envelopes (V1 CCE1 and V1 CCE2).

| Veh | icle 1   | Vehicle 2                                |  |
|-----|--|--|--|
| V21 | (18) Successful corrective action to a previous critical event | (01) Going Straight                      |  |
| V26 | (230) In lane - opposite direction                             | (530) In lane - opposite direction       |  |
| V27 | (12) Braked and steered right                                  | (12) Braked and steered right            |  |
| V28 | (04) Vehicle Skidded   | (04) Vehicle Skidded Longitudinally - No |  |
|     | Longitudinally - No Rotation                                   | Rotation                                 |  |
| V29 | (01) Vehicle Stayed in Travel Lane                             | (01) Vehicle Stayed in Travel Lane       |  |

Vehicle 1's first critical crash envelope (V1 CCE1) ends at the point where the driver of vehicle 1 made a successful corrective action and maintained full control of the vehicle.

Vehicle 1's second **critical crash envelope** (V1 CCE2) begins immediately following the successful corrective action and ends at the point of impact with vehicle 2. Code the critical crash envelope which resulted in vehicle 1's first impact (V1 CCE2).

Vehicle 2 has one critical crash envelope (V2 CCE) which begins at the point where driver 2 recognizes vehicle 1 in his/her travel lane and ends at the point of impact with vehicle 1.

The noncontact vehicle was not involved in an impact with a another vehicle, person, animal, or object in the sequence of accident events and is therefore not included in the General Estimates System.

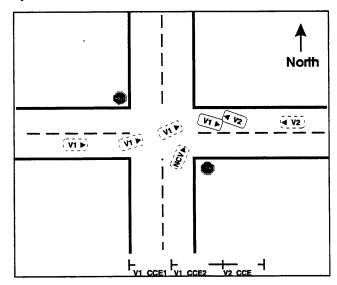


Figure V-7: for Example 3

Vehicle 1 and vehicle 2 are traveling in opposite directions on the same roadway. The driver of vehicle 1 brakes (without lockup) and steers left to avoid a pedestrian who darted into his/her travel lane. Vehicle 1 crosses over the center line into the travel path of vehicle 2. Vehicle 2 attempted to avoid vehicle 1 by braking and steering right onto the shoulder. Vehicle 2 skids and rotates clockwise about 45 degrees before it is impacted in the side by vehicle 1.

| Vehicle 1                          | Vehicle 2                                    |
|------------------------------------|--|
| V21 (01) Going Straight            | (01) Going Straight                          |
| V26 (800) Pedestrian in roadway    | (530) In lane - opposite over left lane line |
| V27 (11) Braked and steered left   | (12) Braked and steered right                |
| V28 (01) Control Maintained        | (02) Rotated clockwise                       |
| V29 (01) Vehicle Stayed on Roadway | (01) Vehicle Stayed in Travel Lane           |
| But Left Travel Lane               |  |

In this example, vehicle 1 has one critical crash envelope (V1 CCE). Vehicle 1's critical crash envelope involved a successful avoidance of a pedestrian [i.e., V26 (Critical Event) equals code "800"] which resulted in an **immediate** impact to vehicle 2. Therefore, the pedestrian is coded as the critical precrash event for vehicle 1. Vehicle 1's corrective action is coded as the action taken to avoid the pedestrian.

Vehicle 2 has one **critical crash envelope** (V2 CCE) which begins at the point where driver 2 recognized and reacted to vehicle 1 in his/her travel lane and ends at the point of impact with vehicle 1.

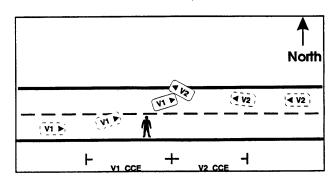


Figure V-8: for Example 4

Vehicle 1 and vehicle 2 are traveling in opposite directions on the same roadway. The driver of vehicle 1 steers left to avoid a pedestrian who darted into his/her travel lane. Vehicle 1 crosses over the center line and the adjacent travel lane, departing the roadway. Then driver 1 re-enters the roadway, in full control of the vehicle but traveling in the lane of opposing traffic. Vehicle 2 attempted to avoid vehicle 1 by steering right and braking (with skidding and clockwise rotation greater than 30 degrees). Vehicle 1 attempted to avoid vehicle 2 by steering right without braking. Vehicle 1 impacted vehicle 2 in the side.

| Vehi | icle 1   | Vehicle 2                          |  |
|------|--|------------------------------------|--|
| V21  | (18) Successful corrective action to a previous critical event | (01) Going Straight                |  |
| V26  | (230) In Lane - Opposite Direction                             | (530) In Lane - Opposite Direction |  |
| V27  | (03) Steered Right   | (12) Braked and steered right      |  |
| V28  | (01) Control Maintained  | (02) Vehicle Rotated Clockwise     |  |
| V29  | (01) Vehicle Stayed in Travel Lane                             | (01) Vehicle Stayed in Travel Lane |  |

In this example, vehicle 1 has two critical crash envelopes (V1 CCE1 and V1 CCE2). Vehicle 1's first **critical crash envelope** (V1 CCE1) begins at the point where driver 1 recognizes the pedestrian coming into his/her travel path and ends at the point where the driver of vehicle 1, having made a successful corrective action, regains full control of the vehicle. Vehicle 1's second **critical crash envelope** (V1 CCE2) begins when driver 1, in full control of vehicle 1, re-enters the roadway in the travel lane of opposing traffic and ends at the point of impact with vehicle 2. Code the critical crash envelope which resulted in vehicle 1's first impact (V1 CCE2).

Vehicle 2 has one **critical crash envelope** (V2 CCE) which begins at the point where driver 2 recognized and reacted to vehicle 1 in his/her travel lane and ends at the point of impact with vehicle 1.

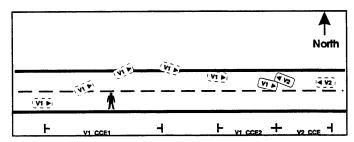


Figure V-9: for Example 5

Vehicle 1 and vehicle 2 are traveling in the same direction in adjacent lanes on a divided highway (with a painted median). Vehicle 1 has a blow out, driver 1 loses control, crosses the left lane line and impacts the right rear of vehicle 2. Vehicle 2 is redirected across the painted median, skidding and rotating clockwise, and subsequently impacts vehicle 3. Vehicle 3 attempted to avoid vehicle 2 by steering right and accelerating.

| Vehicle 1                      | Vehicle 2                  | Vehicle 3                  |
|--------------------------------|----------------------------|----------------------------|
| V21 (01) Going Straight        | (01) Going Straight        | (01) Going Straight        |
| V26 (994) More than 2 vehicles | (994) More than 2 vehicles | (994) More than 2 vehicles |
| V27 (94) More than 2 vehicles  | (94) More than 2 vehicles  | (94) More than 2 vehicles  |
| V28 (94) More than 2 vehicles  | (94) More than 2 vehicles  | (94) More than 2 vehicles  |
| V29 (94) More than 2 vehicles  | (94) More than 2 vehicles  | (94) More than 2 vehicles  |

In this example, V26, V27, V28, and V29 are coded "94" for each vehicle since there were three vehicles involved in the accident. Determination of the critical crash envelope(s) is not relevant in this situation (See diagram of this example for determination of critical crash envelope).

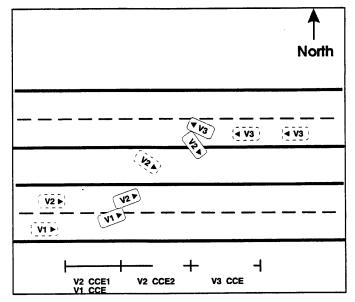


Figure V-10: for Example 6

Vehicle 1 and vehicle 2 are traveling in opposite directions on the same roadway. A noncontact vehicle is parked in front of a noncontact truck-tractor (with a trailer) on the road shoulder and suddenly enters the roadway into vehicle 1's travel lane. The driver of vehicle 1 instantly brakes (with lockup) and steers left (with counterclockwise rotation) to avoid the noncontact vehicle. Vehicle 1 crosses over the center line and immediately impacts vehicle 2. Vehicle 2 had no corrective actions.

In this example, vehicle 1 has one critical crash envelope (V1 CCE).

|          | Vehicle 1  | Vehicle 2                          |  |  |
|----------|--|------------------------------------|--|--|
|          | V21 (01) Going Straight                                    | (01) Going Straight                |  |  |
|          | V26 (630) Another Vehicle                                  | (530) In Lane - Opposite Direction |  |  |
|          | <b>Encroaching From Parking</b>                            |                                    |  |  |
|          | Lane   |                                    |  |  |
|          | V27 (11) Braked and Steered Left                           | (00) No Corrective Action          |  |  |
| <b>■</b> | V28 (03) Vehicle Rotated Counter-<br>Clockwise             | (01) Vehicle Control Maintained    |  |  |
| <b>F</b> | V29 (01) Vehicle Stayed on Roadway<br>but Left Travel Lane | (01) Vehicle Stayed in Travel Lane |  |  |

Vehicle 1's critical crash envelope involved a successful avoidance of a noncontact vehicle and resulted in an immediate impact to vehicle 2. Vehicle 1's critical crash envelope was initiated by the noncontact vehicle, afterwards there was no opportunity for subsequent avoidance actions. Therefore, the encroachment of the noncontact vehicle into vehicle 1's travel lane is coded as the critical precrash event for vehicle 1. Vehicle 1's corrective action is coded as the action taken to avoid the noncontact vehicle.

Vehicle 2 has one critical crash envelope (V2 CCE) which begins at the point where vehicle 1 is in an imminent path of collision with vehicle 2 and ends at the point of impact with vehicle 1.

The noncontact vehicle and the noncontact truck were not involved in an impact in the sequence of accident events and are therefore not coded in the General Estimates System.

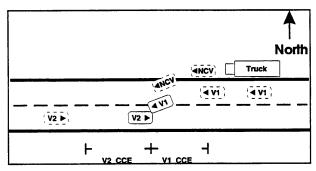


Figure V-11: for Example 7

Vehicle 1 and vehicle 2 are traveling in the same direction in adjacent lanes on a divided highway (with a painted median). Vehicle 1 has a blow out, driver 1 loses control, crosses the left lane line and impacts the right rear of vehicle 2. Vehicle 2 is redirected across the painted median, coming to rest just outside of the travel lane on the opposite side of roadway.

| Vehicle 1   | Vehicle 2  |
|---|--|
| V21 (01) Going Straight                                       | (01) Going Straight  |
| V26 (010) Blowout/flat tire                                   | (620) From adjacent lane (same direction) - over right lane line |
| V27 (00) No Corrective Action                                 | (00) No Corrective Action  |
| V28 (98) Other or Unknown Type of<br>Vehicle Control was Lost | (01) Vehicle Control Maintained                                  |
| V29 (01) Vehicle in Travel Lane                               | (01) Vehicle Stayed in Travel Lane                               |

This example is example 6 with vehicle 3 taken out of the scenario (i.e. there is just one impact, between vehicles 1 and 2 and no impact between vehicles 2 and 3). The past impact trajectory is included in the example 8 diagram simply to confirm that (unlike example 6) there were no additional impacts beyond the FHE.

In this example, vehicle 1 has one critical crash envelope (V1 CCE) which begins with control loss due to the blow out and ends at the point of impact with vehicle 2. The blow out is coded as the critical precrash event (V26 equals 010).

Vehicle 2 has one critical crash envelope (V2 CCE1). Vehicle 2's critical crash envelope (V2 CCE1) begins when vehicle 1 enters vehicle 2's travel lane and ends at the point of impact with vehicle 1.

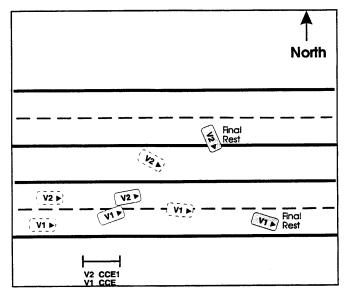


Figure V-12: for Example 8

# V26 Critical Event (Precrash 2)

#### **Element Values**

000 Not Applicable/No Collision

#### I. CRITICAL EVENT INITIATED BY THIS VEHICLE

#### **Loss of Control Due To:**

|     |      | <u> </u> | <b>—</b> 1 . | <b></b> |
|-----|------|----------|--------------|---------|
| 010 | Blow | Out or   | Flat         | lire    |

- 020 Stalled Engine
- 030 Disabling Vehicle Failure (e.g., wheel fell off)
- 040 Minor Vehicle Failure
- 050 Poor Road Conditions (puddle, pot hole, ice, etc.)
- 060 Excessive Speed
- 099 Other or Unknown Reason

#### **Traveling Over Edge of Roadway:**

- 100 Over Left Edge of Roadway
- 101 Over Right Edge of Roadway
- 102 End Departure
- 199 Unknown Which Edge

#### In Another Vehicle's Lane:

200 Stopped



210 Traveling In Same Direction With Lower Steady Speed



- 215 Traveling In Same Direction While Decelerating
- 220 Traveling In Same Direction With Higher Speed
- 230 Traveling In Opposite Direction

#### **Encroaching Into Another Vehicle's Lane: At Non-Junction**

- 300 From Adjacent Lane (Opposite Direction)
- 310 From Adjacent Lane (Same Direction) Over Left Lane Line
- 320 From Adjacent Lane (Same Direction) Over Right Lane Line
- 330 From Parallel/Diagonal Parking Lane

#### **Encroaching Into Another Vehicle's Lane: At Junction**

- 410 Entering Intersection Turning Into Same Direction
- 411 Entering Intersection Straight Across Path
- 412 Entering Intersection Turning Across Path
- 413 Entering Intersection Turning Into Opposite Direction
- 429 Entering Intersection Intended Path Unknown
- 430 Entering Driveway, Alley Access, Etc.
- 440 From Driveway, Alley Access, Etc. Turning Into Same Direction
- 441 From Driveway, Alley Access, Etc. Straight Across Path
- 442 From Driveway, Alley Access, Etc. Turning Into Opposite Direction
- 459 From Driveway, Alley Access, Etc. Intended Path Unknown
- 460 Entering From "Yield" Entrance (Ramp/Channel)
- 497 Encroaching Other
- 498 Encroaching Details Unknown
- 499 This Vehicle Initiated Critical Event Details Unknown

#### II. CRITICAL EVENT INITIATED BY THE OTHER VEHICLE

#### Motor Vehicle Already In This Vehicle's Lane:

- 500 Stopped
- 510 Traveling in Same Direction With Lower Steady Speed
- 515 Traveling In Same Direction While Decelerating
  - 520 Traveling in Same Direction With Higher Speed
  - 530 Traveling in Opposite Direction

#### **Another Vehicle Encroaching Into Lane: Not At Junction**

- 600 From Adjacent Lane (Opposite Direction)
- 610 From Adjacent Lane (Same Direction) Over Left Lane Line
- 620 From Adjacent Lane (Same Direction)- Over Right Lane Line
- 630 From Parallel/Diagonal Parking Lane

#### **Another Vehicle Encroaching Into Lane: At Junction**

- 710 Entering Intersection Turning Into Same Direction
- 711 Entering Intersection Straight Across Path
- 712 Entering Intersection Turning Across Path
- 713 Entering Intersection Turning Into Opposite Direction
- 729 Entering Intersection Intended Path Unknown
- 730 Entering Driveway, Alley Access, Etc.
- 740 From Driveway, Alley Access, Etc. Turning Into Same Direction
- 741 From Driveway, Alley Access, Etc. Straight Across Path
- 742 From Driveway, Alley Access, Etc. Turning Into Opposite Direction
- 759 From Driveway, Alley Access, Etc. Intended Path Unknown
- 760 Entering From "Yield" Entrance (Ramp/Channel)

- 797 Encroaching Other
- 798 Encroaching Details Unknown
- 799 Other Vehicle Initiated Critical Event Details Unknown

# III. CRITICAL EVENT INITIATED BY PEDESTRIAN, PEDALCYCLIST, OTHER NON-MOTORIST, ANIMAL OR OBJECT

Pedestrian in Roadway 800 801 Pedestrian Approaching Roadway Pedalcyclist/Other Non-Motorist in Roadway 810 811 Pedalcyclist/Other Non-Motorist Approaching Roadway 829 Pedestrian/Pedalcyclist/Other Non-Motorist - Unknown Location Animal in Roadway 830 Animal Approaching Roadway 831 840 Object in Roadway 841 Object Approaching Roadway

#### IV. MISCELLANEOUS

859

994 More Than Two Vehicles Involved

Animal or Object - Unknown Location

- 998 Other Event
- 999 Unknown

#### Remarks

This variable identifies the critical event which made the crash imminent (i.e., something occurred which made the collision possible). Responsive actions to this situation (if any) are coded under "V27" Corrective Action Attempted.

A Critical Event is coded for each vehicle and identifies the circumstances leading to this vehicle's first impact in the accident.

Responses are grouped into the following major categories and sub-categories:

- I. Critical Event Initiated By This Vehicle
  - Losing control due to
  - Traveling over edge of roadway
  - In another vehicle's lane
  - Encroaching on another vehicle's lane: at non-junction
  - Encroaching on another vehicle's lane: non-junction
- II. Critical Event Initiated By The Other Vehicle
  - Motor vehicle already in this vehicle's lane:
  - Another vehicle encroaching into this vehicle's lane: not at junction
  - Another vehicle encroaching into this vehicle's lane: at junction
- III. Critical Event Initiated By Pedestrian, Bicyclist, Animal or Object
- IV. Miscelleanous

Reference to culpability should be avoided. Many accident scenarios will suggest fault, but this should be considered coincidental rather than by design. As an example, Vehicle A was traveling too fast for conditions (Code 060) when Vehicle B crossed Vehicle A's path from a driveway (Code 741). The situation which made the precrash event critical for vehicle A was Vehicle B's movement across Vehicle A's path and not Vehicle A's speed.

**Code "000"** (Not Applicable/No Collision) is used when the only event(s) involved does not include an impact. Such non-impact events include: fire/explosion; immersion; non-collision injury (injured in or fell from vehicle); other non-collision; and thrown or falling object (A06="02-03", "06-10" and no other event than these occurred).

#### I. Critical Event Initiated by this Vehicle

#### **Losing Control Due To**

Codes 010-099 identify situations where the critical factor leading to the collision involved control loss of this vehicle. Control loss can be related to either mechanical failure or environmentally induced vehicle instability. When more than one condition applies and it can not be determined which one had a greater effect, choose the lower attribute number (i.e., Code 010 takes priority over Code 020).

Code "010" (Blow-out/Flat Tire) is used when a vehicle in motion loses control as the result of a tire "air out".

**Code "020" (Stalled Engine)** refers to a vehicle which is in motion and loses engine power. A stalled engine situation must precipitate a collision to be coded in this variable. A vehicle which is stopped as the result of an engine malfunction should not be coded here.

Code "030" [Disabling Vehicle Failure (e.g., wheel fell off)] is used when a mechanical malfunction, such as a component of the vehicle suspension or steering system, lead to the critical reason for the collision.

Code "040" [Minor Vehicle Failure (e.g., hood flew up)] is used when some mechanical abnormality occurred to this vehicle which lead to the critical reason for the collision. The abnormality must not be disabling damage.

Code "050" [Poor Road Conditions (puddle, pot hole, ice, etc.)] captures control loss due to environmental conditions of the roadway. These conditions must have initiated the precrash event which resulted in the collision.

Code "060" (Excessive Speed) identifies this vehicle's movement relative to its surroundings in which the subsequent loss of control led to the collision. An example would include a roadway departure on a curve which the driver failed to negotiate but departed the roadway resulting in an impact. If the driver merely steered straight while in a curve and departed the roadway, then codes "100 - 102" may apply.

Code "099" (Other or Unknown Reasons) is used when it was determined that this vehicle's loss of control was the primary reason which made the event critical and the cause of the loss of control is known but codes "010 - 060" do not adequately identify the control loss condition. This code is also used when this vehicle's loss of control was the primary reason which made the event critical but the cause of the loss of control is not known.

#### Traveling Over Edge of Roadway

Codes "100 - 199" identify situations where the critical factor leading to the collision involved the travel path of this vehicle.

Code "100" (Over Left Edge of Roadway) is used when this vehicle departs its roadway to the left and this departure precipitates the critical event for the collision. The departure can be to the shoulder, off the shoulder or off the trafficway. If the vehicle departs its lane to the left and travels into another lane then code "100" should not be used (codes "230" or "310" may be more appropriate).

Code "101" (Over Right Edge of Roadway) is used when this vehicle departs its roadway to the right and this departure precipitates the critical event for the collision. The departure can be to the shoulder, off the shoulder or off the trafficway. If the vehicle departs its lane to the right and travels into another lane then code "101" should not be used (codes "210", "220" or "320" may be more appropriate).

Code "199" (Unknown Which Edge) should be used for those occasions where this vehicle's roadway departure made the situation critical, but it is not known which side of the roadway the vehicle departed.

#### In Another Vehicle's Lane

Codes "200" - "203" identify situations where the critical factor leading to the collision involved the travel of this vehicle in the same lane as the other vehicle. These codes should be used when more than 50% of this vehicle is in the particular lane in which the critical event occurs. If 50% or less of the vehicle is in the lane in which the critical event occurs then the vehicle is considered "encroaching" and codes "310 - 499" should be used.

**Code "200" (Stopped)** identifies a situation where this vehicle is not in motion (i.e., stopped, parked, disabled) and in the other vehicle's travel lane.



Code "210" (Traveling In Same Direction With Lower Steady Speed) should be used when this vehicle was the lead vehicle in the same travel lane, traveling in the same direction, and was traveling slower than the other vehicle at a reasonably constant speed.



Code "215" (Traveling In Same Direction While Decelerating) should be used when this vehicle was the lead vehicle in the same travel lane as the other vehicle, traveling in the same direction, and was slowing. Use "210" (Traveling In Same Direction With Lower Steady Speed) if this vehicle was going slower but was traveling at a reasonably constant speed.

Code "220" (Traveling in Same Direction with Higher Speed) should be used when the speed of this vehicle was higher than the other vehicle. This vehicle must be overtaking the other vehicle.

Code "230" (Traveling in Opposite Direction) is used when this vehicle was traveling head-on in the other vehicle's travel lane.

#### **Encroaching on Another Vehicle's Lane: Not At Junction**

Code "300" [From Adjacent Lane (Opposite Direction)] is used when this vehicle encroaches into another vehicle's lane such that this vehicle is traveling in the opposite direction to the normal flow of traffic.

Code "310" [From Adjacent Lane (Same Direction) - Over Left Lane Line] is used when this vehicle is in the next lane to its left and is not at a junction and encroaches on another vehicle's path of travel.

Code "320" [From Adjacent Lane (Same Direction) - Over Right Lane Line] is used when this vehicle is in the next lane to its right and is not at a junction and encroaches on another vehicle's path of travel.

Code "330" [From Parallel/Diagonal Parking Lane] is used when this vehicle was departing a parking lane (parallel or diagonal) and entering the other vehicle's travel lane.

#### **Encroaching Into Another Vehicle's Lane: At Junction**

Code "410" (Entering Intersection - Turning Into Same Direction) is used when this vehicle was turning from another roadway and attempted to travel in the same direction as the other vehicle. This code should not be used for entrance ramps leading onto limited access highways.

Code "411" (Entering Intersection - Straight Across Path) is used when this vehicle was continuing straight through the intersection on a path which would intersect with the other vehicle.

Code "412" (Entering Intersection - Turning Across Path) is used when this vehicle entered an intersection from another roadway and turned or attempted to turn across the path of the other vehicle.

Code "413" (Entering Intersection - Turning Into Opposite Direction) is used when this vehicle was entering an intersection from another roadway and was turning or attempting to turn into the opposite direction of the other vehicle.

Code "429" (Entering Intersection - Intended Path Unknown) is used in those situations where this vehicle's entrance into the intersection was the critical factor which lead to the collision, however, the travel direction could not be determined.

Code "430" (Entering Driveway, Alley Access, Etc.) is used when this vehicle was turning from a trafficway into a driveway and this activity precipitates the critical event.

Code "440" (From Driveway, Alley Access, Etc. - Turning Into Same Direction) identifies a situation where this vehicle was turning from a driveway and attempted to travel in the same direction as the other vehicle.

Code "441" (From Driveway, Alley Access, Etc. - Straight Across Path) is used when this vehicle was traversing the other vehicle's travel lane from a driveway and was continuing straight across to another driveway or roadway.

Code "442" (From Driveway, Alley Access, Etc. - Turning Into Opposite Direction) is used when this vehicle was entering the other vehicle's roadway from a driveway and was attempting to turn into the opposite travel direction of the other vehicle.

Code "459" (From Driveway, Alley Access, Etc. - Intended Path Unknown) is used when this vehicle was exiting a driveway but its intended path was not known.

Code "460" [Entering From "Yield" Entrance (Ramp/Channel)] identifies an entrance ramp or channel situation where this vehicle was attempting to enter (merge) onto the roadway which was being traveled by the other vehicle.



**Code "497" (Encroaching - Other)** is used when this vehicle encroached upon another vehicle but the situation does not fit any of the other elements above. Use this code whenever one of the specific situations cited below exists:

- This vehicle is on the shoulder prior to the critical event, and pulls out into a traffic lane to make a U-turn.
- This vehicle pulls out of a median/crossover area to cross the roadway into the path of another vehicle.

Code "498" (Encroaching - Details Unknown) is used for situations where this vehicle encroached on the path of the other vehicle, but circumstances surrounding this vehicles encroachment were not known.

Code "499" (This Vehicle Initiated Critical Event - Details Unknown) is used when this vehicle is known to have initiated the critical event but the information needed to select one of the five sub-categories is not known.

#### II. Critical Event Initiated by the Other Vehicle

#### Motor Vehicle Already in This Vehicle's Lane

Codes "500" - "530" identify situations where the critical factor leading to the collision involved the travel of the other vehicle in the same lane as this vehicle. These codes should be used when more than 50% of the other vehicle is in the particular lane in which the critical event occurs. If 50% or less of the vehicle is in the lane in which the critical event occurs then the vehicle is considered "encroaching" and codes "600 - 799" should be used.

**Code "500" (Stopped)** identifies a situation where the other vehicle is not in motion (i.e., stopped, parked, disabled) and in this vehicle's travel lane.

Code "510" (Traveling In Same Direction With Lower Steady Speed) should be used when the other vehicle was the lead vehicle in the same travel lane, traveling in the same direction, and was traveling slower than this vehicle at a reasonably constant speed.

Code "515" (Traveling in Same Direction While Decelerating) should be used when the other vehicle was the lead vehicle in the same travel lane, traveling in the same direction, and was slowing. Use "510" (Traveling In Same Direction With Lower Steady Speed) if this vehicle was going slower but was traveling at a reasonably constant speed.

Code "520" (Traveling in Same Direction with Higher Speed) should be used when the speed of the other vehicle was higher than this vehicle. The other vehicle must be overtaking this vehicle.

Code "530" (Traveling in Opposite Direction) is used when the other vehicle was traveling head-on in this vehicle's travel lane.

#### Another Vehicle Encroaching Into Lane: Not At Junction

Code "600" [From Adjacent Lane (Opposite Direction)] is used when the other vehicle encroaches into this vehicle's lane such that the other vehicle is traveling in the opposite direction to the normal flow of traffic.

Code "610" [From Adjacent Lane (Same Direction) - Over Left Lane Line] is used when the other vehicle is in the next lane to its left and is not at a junction and encroaches on this vehicle's path of travel.

Code "620" [From Adjacent Lane (Same Direction) - Over Right Lane Line] is used when the other vehicle is in the next lane to its right and is not at a junction and encroaches on this vehicle's path of travel.

Code "630" (From Parallel/Diagonal Parking Lane) is used when the other vehicle was departing a parking lane (parallel or diagonal) and entering this vehicle's travel lane.

#### **Another Vehicle Encroaching Into Lane: At Junction**

Code "710" (Entering Intersection - Turning Into Same Direction) is used when the other vehicle was turning from another roadway and attempted to travel in the same direction as this vehicle. This code should not be used for entrance ramps leading onto limited access highways.

Code "711" (Entering Intersection - Straight Across Path) is used when the other vehicle was continuing straight through the intersection on a path which would cross with this vehicle.

Code "712" (Entering Intersection - Turning Across Path) is used when the other vehicle enters an intersection from another roadway and turns or attempts to turn across the path of this vehicle.

Code "713" (Entering Intersection - Turning Into Opposite Direction) is used when the other vehicle was entering an intersection from another roadway and was turning or attempting to turn into the opposite direction of this vehicle.

Code "729" (Entering Intersection - Intended Path Unknown) is used in those situations where the other vehicle's entrance into the intersection was the critical factor which lead to the collision, however, the travel direction could not be determined.

Code "730" (Entering Driveway, Alley Access, Etc.) is used when the other vehicle was turning from a trafficway into a driveway and this activity precipitates the critical event.

Code "740" (From Driveway, Alley Access, Etc. - Turning Into Same Direction) identifies a situation where the other vehicle was turning from a driveway and attempted to travel in the same direction as this vehicle.

Code "741" (From Driveway, Alley Access, Etc. - Straight Across Path) is used when the other vehicle was traversing this vehicle's travel lane from a driveway and was continuing straight across to another driveway or roadway.

Code "742" (From Driveway, Alley Access. Etc. - Turning Into Opposite Direction) is used when the other vehicle was entering this vehicle's roadway from a driveway and was attempting to turn into the opposite travel direction of this vehicle.

Code "759" (From Driveway, Alley Access, Etc. - Intended Path Unknown) is used when the other vehicle was exiting a driveway but its intended path was not known.

Code "760" [Entering From "Yield" Entrance (Ramp/Channel)] identifies an entrance ramp or channel situation where the other vehicle was attempting to enter (merge) onto the roadway which was being traveled by this vehicle.

- Code "797" (Encroaching Other) is used when the other vehicle encroached upon this vehicle but the situation does not fit any of the other elements above. Use this code whenever one of the specific situations cited below exists:
  - The other vehicle is on the shoulder prior to the critical event, and pulls out into a traffic lane to make a U-turn.
  - The other vehicle pulls out of a median/crossover area to cross the roadway into the path of this vehicle.

Code "798" (Encroaching - Details Unknown) is used for situations where the other vehicle encroached on the path of this vehicle, but circumstances surrounding the other vehicle's encroachment were not known.

Code "799" (Other Vehicle Initiated Critical Event - Details Unknown) is used when the other vehicle is known to have initiated the critical event but the information needed to select one of the five sub-categories is not known.

#### III. Critical Event Initiated By Pedestrian, Pedalcyclist, Other Non-Motorist, Animal or Object

Codes "800 - 859" identify situations where the critical factor leading to the collision for this vehicle involved a pedestrian, pedalcyclist, other nonmotorist, object or animal. A pedalcyclist is defined as a person riding a pedal power conveyance (e.g., bicycle, tricycle, etc.). A nonmotorist is defined as a person riding on or in a conveyance which is not motorized or propelled by pedaling (e.g., baby carriage, skate board, roller blades, etc.).

Code "800" (Pedestrian in Roadway) is used when a pedestrian was present (e.g., sitting, standing, walking, or running, etc.) in the roadway.

Code "801" (Pedestrian Approaching Roadway) identifies situations where a pedestrian was within the trafficway and moving toward the roadway or attempting to enter the roadway, but was not on the roadway.

Code "810" (Pedalcyclist/Other Non-Motorist in Roadway) is used when a pedalcyclist or other nonmotorist was present in the roadway (irrespective of relative motion).

Code "811" (Pedalcyclist/Other Non-Motorist Approaching Roadway) identifies situations where the pedalcyclist or other nonmotorist was within the trafficway and moving toward the roadway or attempting to enter the roadway, but was not on the roadway.

Code "829" (Pedestrian/Pedalcyclist/Other Non-Motorist - Unknown Location) is used when it was determined the presence or action of a pedestrian, pedalcyclist or other nonmotorist was the critical factor which lead to this vehicle's collision, but the action of the pedalcyclist or other nonmotorist was not known.

Code "830" (Animal in Roadway) is used when an animal was present (i.e., stationary or moving) in the roadway.

Code "831" (Animal Approaching Roadway) identifies situations where an animal was within the trafficway and moving toward the roadway or attempting to enter the roadway, but not on the roadway.

Code "840" (Object In Roadway) is used when an animal or object was present in the roadway. An object can be either fixed or nonfixed.

Code "841" (Object Approaching Roadway) identifies situations where an object was within the trafficway and moving toward the roadway, but not on the roadway.

Code "859" (Animal/Object - Unknown Location) is used when it was determined the presence or movement of an animal or object was the critical factor which lead to this vehicle's collision, but details surrounding the action of the animal or location of the object were not known.

Code "994" (More Than Two Vehicles Involved) if more than two vehicles were involved in the crash (A03 =2) then this code should be used for all vehicles.

#### IV. Miscellaneous

Code "998" (Other Event) is used when a critical factor not previously listed resulted in the collision for this vehicle. Previous impacts in the accident should not be considered as other initial precrash events. An example would include a situation where the critical event developed from this vehicle's departure from a driveway.

**Code "999" (Unknown)** should be used when the initial critical event which resulted in the collision was not known.

# Coding V21 (Precrash 1) and V26 (Precrash 2) for Different Rear-End Collision Situations

|    |   |            | Trailin   | g Vehicle   | Leading Vehicle |   |
|----|---|------------|-----------|---|-----------------|---|
| 1) | Both vehicles in motion.<br>Leading vehicle,<br>traveling at steady speed<br>,is struck from behind<br>by trailing vehicle.   | V21<br>V26 | 01<br>510 | (Going Straight) (Other vehicle same direction with lower steady speed)   | 01<br>520       | (Going Straight) (Other vehicle same direction with higher speed)     |
| 2) | Both vehicles traveling at same speed. Lead vehicle decelerates and trailing vehicle continues at initial speed. Trailing vehicle eventually applies brakes before striking the lead vehicle. | V21<br>V26 | 01<br>515 | (Going Straight) (Other vehicle same direction while decelerating)        | 01<br>215       | (Going Straight) (This vehicle same direction while decelerating)     |
| 3) | Both vehicles traveling<br>at same speed. Lead<br>vehicle stops and is<br>immediately struck by<br>trailing vehicle.  | V21<br>V26 | 01<br>515 | (Going Straight) (Other vehicle same direction while decelerating)        | 01<br>520       | (Going Straight) (This vehicle same direction while higher speed)     |
| 4) | Lead vehicle is stopped<br>on roadway and is<br>struck by a trailing<br>vehicle.  | V21<br>V26 | 01<br>500 | (Going Straight) (Other vehicle is stopped in lane)                       | 14<br>520       | (Going Straight) (This vehicle same direction while higher speed)     |
| 5) | Lead and trailing vehicle stopped on roadway. Lead vehicle backs into trailing vehicle.   | V21<br>V26 | 530       | (Stopped in traffic lane) (Other vehicle Traveling in Opposite Direction) | 500             | (Stopped in<br>traffic lane)<br>(Other vehicle is<br>stopped in lane) |

## **Consistency Check**

|       |  | V Z U   |
|-------|--|---|
| AV184 | NUMBER OF MOTOR VEHICLES (A03) equals 01 and RELATION TO ROADWAY (A10) equals 2 or 3 and CORRECTIVE ACTION ATTEMPTED (V27) equals 00 | <b>THEN</b> CRITICAL EVENT (V26) should equal 010-060, 099, 100, 101, 102, 199, <i>or 994</i> .       |
| AV185 | FIRST HARMFUL EVENT (A6) equals 02-03, 06-10 and MOST HARMFUL EVENT (V20) equals 02-03, 06-10  | CRITICAL EVENT (V26) should equal 000 or 994.   |
| AV221 | NUMBER OF MOTOR VEHICLES (A3) is greater than 02   | CRITICAL EVENT (V26) must equal 994.  |
| AV239 | NUMBER OF MOTOR VEHICLES (A3) equals 01 or 02  | CRITICAL EVENT (V26) must not equal 994.  |
| VA189 | CRITICAL EVENT (V26) equals<br>410-460, 710-760 and<br>CORRECTIVE ACTION<br>ATTEMPTED (V27) equals 00                                | CRITICAL EVENT (V26) equals<br>410-460, 710-760 and CORRECTIVE<br>ACTION ATTEMPTED (V27) equals<br>00 |
| VA190 | CRITICAL EVENT (V26) equals<br>430-459, 730-759 and<br>CORRECTIVE ACTION<br>ATTEMPTED (V27) equals 00                                | RELATION TO JUNCTION (A9) should equal 03 or 13.  |
| VA191 | CRITICAL EVENT (V26) equals 000  | FIRST HARMFUL EVENT (A6) and MOST HARMFUL EVENT (V20) should equal 02-03, 06-10.                      |
| VA240 | CRITICAL EVENT (V26) equals 994  | NUMBER OF MOTOR VEHICLES (A3) must be greater than 02.  |
| VA241 | CRITICAL EVENT (V26) is not equal to 994   | NUMBER OF MOTOR VEHICLES (A3) must equal 01 or 02.  |
| VV123 | CRITICAL EVENT (V26) does not equal 994  | CORRECTIVE ACTION ATTEMPTED (V27) must not equal 94.  |
| VV124 | CRITICAL EVENT (V26) equals 010, 020, 030, 040   | VEHICLE CONTRIBUTING FACTORS (V12) must not equal 00.   |

**V26** 

| VV125 | IF CRITICAL EVENT (V26) equals 994   | THEN CORRECTIVE ACTION ATTEMPTED (V27) must equal 94.   |
|-------|--|---|
| VV136 | PRECRASH LOCATION (V29) equals 94  | CRITICAL EVENT (V26) must equal 994.  |
| VV137 | PRECRASH LOCATION (V29) does<br>not equal 94   | CRITICAL EVENT (V26) must not equal 994.  |
| VV175 | ACCIDENT TYPE (V23) equals<br>20-49 and CORRECTIVE ACTION<br>ATTEMPTED (V27) equals 00       | CRITICAL EVENT (V26) should not equal 100-199, 230, 300, 411-430, 441-459, 530, 600, 711-730, 741-759, 800-859.   |
| VV176 | ACCIDENT TYPE (V23) equals 50-67 and CORRECTIVE ACTION ATTEMPTED (V27) equals 00             | CRITICAL EVENT (V26) should not equal 100, 101, 102, 199, 210, 220, 310, 320, 410, 411, 440, 441, 510, 515, 520, 610, 620, 710, 711, 740, 741, 800-859. |
| VV182 | CRITICAL EVENT (V26) equals 102 and CORRECTIVE ACTION ATTEMPTED (V27) equals 00              | ACCIDENT TYPE (V23) must equal 14.  |
| VV183 | CRITICAL EVENT (V26) equals<br>440-529 and CORRECTIVE<br>ACTION ATTEMPTED (V27)<br>equals 00 | MOVEMENT PRIOR TO CRITICAL EVENT (V21) should equal 98.   |
| VV211 | DRIVER MANEUVERED TO<br>AVOID (D06) equals 03  | CRITICAL EVENT (V26) should equal 830, 831, 859, or 994.  |
| VV212 | DRIVER MANEUVERED TO<br>AVOID (D6) equals 05   | CRITICAL EVENT (V26) should equal 800-829 or 994.   |
| VV214 | DRIVER MANEUVERED TO<br>AVOID (D6) equals 04   | CRITICAL EVENT (V26) should equal 500-799 or 994.   |
| VV215 | DRIVER MANEUVERED TO<br>AVOID (D6) equals 01   | CRITICAL EVENT (V26) should equal 840, 841, 859 or 994.   |
| VV224 | CRITICAL EVENT (V26) equals 210, 215, or 520   | INITIAL POINT OF IMPACT (V24) should not equal 01.  |
| VV225 | CRITICAL EVENT (V26) equals 220, 510, or 515   | INITIAL POINT OF IMPACT (V24) should not equal 04.  |

|          |       | IF  | THEN  |
|----------|-------|---|---|
|          | VV227 | CRITICAL EVENT (V26) equals 210, 215, or 520  | VEHICLE ROLE (V22) must not equal 1.                  |
|          | VV228 | CRITICAL EVENT (V26) equals 220, 510, or 515  | VEHICLE ROLE (V22) must not equal 2.                  |
|          | VV229 | VEHICLE ROLE (V22) equals 1   | CRITICAL EVENT (V26) must not equal 210, 215, or 520. |
|          | VV230 | VEHICLE ROLE (V22) equals 2   | CRITICAL EVENT (V26) must not equal 220, 510, or 515. |
|          | VV237 | CRITICAL EVENT (V26) equals 841<br>and CORRECTIVE ACTION<br>ATTEMPTED (V27) equals 00 | ACCIDENT TYPE (V23) should equal 15.                  |
|          | VV238 | CRITICAL EVENT (V26) equals 840<br>and CORRECTIVE ACTION<br>ATTEMPTED (V27) equals 00 | ACCIDENT TYPE (V23) should equal 12.                  |
| <b>K</b> | VV239 | CRITICAL EVENT (V26) equals   | ACCIDENT TYPE (V23) should equal 00.                  |
|          | VV240 | ACCIDENT TYPE (V23) equals 00   | CRITICAL EVENT (V26) should equal 000.                |

# V27 Corrective Action Attempted (Precrash 3)

#### **Element Values**



00

Not Applicable/No Corrective Action Attempted

#### **Single Corrective Action**

- 01 Braked/Slowed
- 02 Steered to Left
- 03 Steered to Right
- 04 Accelerated
- 05 Backed

#### **Multiple Corrective Actions**

- 11 Braked and Steered to Left
- 12 Braked and Steered to Right
- 13 Accelerated and Steered to Left
- 14 Accelerated and Steered to Right
- 15 Steered in Both Directions
- 94 More Than Two Vehicles Involved
- 97 Corrective Action Attempted No Details
- 98 Other Single or Multiple Corrective Action
- 99 Unknown if Driver Attempted Any Corrective Action

#### Remarks

Corrective actions are movements/actions attempted by the driver to avoid an impending impact after realization of an impending danger, but before the actual event. Because this variable focuses upon the driver's action just prior to the first harmful event it is coded independently of any maneuvers associated with this vehicle's Accident Type, (V23).

Code the value which best describes the actions taken by the driver of this vehicle in response to the impending danger. When there was a known action but you cannot determine whether there was more than one action (e.g., braking and steering left) default to the known action (e.g., braking).



### Enter "00" (Not Applicable/No Corrective Action Attempted)

when there is no movement or action taken by this driver to respond to the impending danger. Use this code also when there is no driver present (D01="0").

## **Consistency Check**

| <b>N</b> 4 | 7 | - |
|------------|---|---|
| v          | _ | 1 |

|          | AV184 | NUMBER OF MOTOR VEHICLES (A3) equals 01 and RELATION TO ROADWAY (A10) equals 2 or 3 and CORRECTIVE ACTION ATTEMPTED (V27) equals 00 | <b>THEN</b> CRITICAL EVENT (V26) should equal 010-060, 099, 100, 101, 102, 199, or 994. |
|----------|-------|---|---|
|          | AV186 | RELATION TO ROADWAY (A10) equals 3 or 8 and CORRECTIVE ACTION ATTEMPTED (V27) is not equal to 00 or 94 or 99                        | VEHICLE PATH AFTER<br>CORRECTIVE ACTION (V29)<br>should equal 04.                       |
|          | VA189 | CRITICAL EVENT (V26) equals<br>410-460, 710-760, and<br>CORRECTIVE ACTION<br>ATTEMPTED (V27) equals 00                              | RELATION TO JUNCTION (A9) should not equal 00 or 10.                                    |
|          | VA190 | CRITICAL EVENT (V26) equals<br>430-459, 730-759 and<br>CORRECTIVE ACTION<br>ATTEMPTED (V27) equals 00                               | RELATION TO JUNCTION (A9) should equal 03 or 13.  |
|          | VV122 | ACCIDENT TYPE (V23) equals 03, 08, 38, 40, 58, or 60  | CORRECTIVE ACTION ATTEMPTED (V27) must not equal 00.                                    |
|          | VV123 | CRITICAL EVENT (V26) does not equal 994   | CORRECTIVE ACTION ATTEMPTED (V27) must not equal 94.                                    |
|          | VV125 | CRITICAL EVENT (V26) equals 994   | CORRECTIVE ACTION ATTEMPTED (V27) must equal 94.  |
| <b>₽</b> | VV127 | CORRECTIVE ACTION ATTEMPTED (V27) does not equal 94   | PRECRASH VEHICLE CONTROL (V28) must not equal 94.                                       |
|          | VV128 | CORRECTIVE ACTION ATTEMPTED (V27) equals 94   | PRECRASH VEHICLE CONTROL (V28) must equal 94.   |
|          | VV134 | PRECRASH LOCATION (V29) equals 00   | CORRECTIVE ACTION ATTEMPTED (V27) must equal 00.  |

| VV175 | IF ACCIDENT TYPE (V23) equals 20-49 and CORRECTIVE ACTION ATTEMPTED (V27) equals 00          | <b>THEN</b> CRITICAL EVENT (V26) should not equal 100-199, 230, 300, 411-430, 441-459, 530, 600, 711-730, 741-759, 800-859.                             |
|-------|--|---|
| VV176 | ACCIDENT TYPE (V23) equals<br>50-67 and CORRECTIVE ACTION<br>ATTEMPTED (V27) equals 00       | CRITICAL EVENT (V26) should not equal 100, 101, 102, 199, 210, 220, 310, 320, 410, 411, 440, 441, 510, 515, 520, 610, 620, 710, 711, 740, 741, 800-859. |
| VV182 | CRITICAL EVENT (V26) equals 102 and CORRECTIVE ACTION ATTEMPTED (V27) equals 00              | ACCIDENT TYPE (V23) must equal 14.  |
| VV183 | CRITICAL EVENT (V26) equals<br>440-459 and CORRECTIVE<br>ACTION ATTEMPTED (V27)<br>equals 00 | MOVEMENT PRIOR TO CRITICAL EVENT (V21) should equal 98.   |
| VV218 | CORRECTIVE ACTION ATTEMPTED (V27) equals 00  | DRIVER MANEUVERED TO AVOID (D6) should equal 00 or 50.  |
| VV232 | MOVEMENT PRIOR TO CRITICAL<br>EVENT (V21) equals 00  | CORRECTIVE ACTION<br>ATTEMPTED (V27) must equal 00 or<br>94.  |
| VV237 | CRITICAL EVENT (V26) equals 841<br>and CORRECTIVE ACTION<br>ATTEMPTED (V27) equals 00        | ACCIDENT TYPE (V23) should equal 15.  |
| VV238 | CRITICAL EVENT (V26) equals 840<br>and CORRECTIVE ACTION<br>ATTEMPTED (V27) equals 00        | ACCIDENT TYPE (V23) should equal 12.  |

# ► V28 Precrash Vehicle Control (Precrash 4)

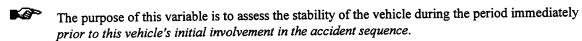
#### Flement Values

| 00 | No Driver Present                                 |
|----|---|
| 01 | Vehicle Control Maintained                        |
| 02 | Vehicle Rotated (Yawed) Clockwise                 |
| 03 | Vehicle Rotated (Yawed) Counter-Clockwise         |
| 04 | Vehicle Slid/Skid Longitudinally - No Rotation    |
| 09 | Vehicle Rotated (Yawed) Unknown Direction         |
| 20 | Combination Of 02 Through 09                      |
| 94 | More Than Two Vehicles Involved                   |
| 98 | Other Or Unknown Type Of Vehicle Control Was Lost |

Unknown If Vehicle Control Was Lost

#### Remarks

99



- Code "00" (No Driver Present) when there is no driver present in the vehicle just prior to its involvement in the crash (D01, Driver Presence, equals "0").
- Code "01" (Vehicle Control Maintained) when the vehicle continued along its intended path without any loss of control. Slowing, turning, or accelerating to avoid a rear-end collision are examples.
- Code "02" [Vehicle Rotated (Yawed) Clockwise] when the driver of a vehicle applies the brakes with sufficient force to lock the wheels and the vehicle rotates clockwise, relative to the driver's seating position. This value also applies when the driver attempts a steering input and the vehicle rotates clockwise.
- Code "03" [Vehicle Rotated (Yawed) Counter-Clockwise] when the driver of a vehicle applies the brakes with sufficient force to lock the wheels and the vehicle rotates counter-clockwise, relative to the driver's seating position. This value also applies when the driver attempts a steering input and the vehicle rotates counter-clockwise.

Code "04" (Vehicle Slid/Skid Longitudinally - No Rotation) when the driver of a vehicle applies the brakes with sufficient force to lock the brakes causing the vehicle to skid. The vehicle must continue along its initial path (tracking) and there was no sign of vehicle rotation.

Code "09" [Vehicle Rotated (Yawed) - Unknown Direction] whenever codes "02" or "03" would apply but the specific direction of rotation is not known.

Code "20" (Combination of Codes 02 Through 09) is used whenever more than one of the activities described by codes "02 - 09" took place prior to the impact.

**Code "94" (More Than Two Vehicles Involved)** is coded whenever A3 (Number of Motor Vehicles) is greater than "02".



Code "98" (Other or Unknown Type Of Vehicle Control Was Lost) whenever a driver loses control of a vehicle, is involved in an impact and values "01-20" do not apply (e.g., rollover, vault).



Code "99" (Unknown If Vehicle Control Was Lost) whenever the stability of the vehicle cannot be determined. Also use this code when this vehicle is a hit-and-run vehicle and no information is available.

## **Consistency Check**

|       |  | <b>VAU</b>  |
|-------|--|---|
| VV127 | IF CORRECTIVE ACTION ATTEMPTED (V27) does not equal 94 | THEN  PRECRASH VEHICLE CONTROL  (V28) must not equal 94.      |
| VV128 | CORRECTIVE ACTION ATTEMPTED (V27) equals 94            | PRECRASH VEHICLE CONTROL (V28) must equal 94.                 |
| VV131 | PRECRASH VEHICLE CONTROL (V28) does not equal 94       | PRECRASH LOCATION (V29) must not equal 94.                    |
| VV133 | PRECRASH VEHICLE CONTROL (V28) equals 94               | PRECRASH LOCATION (V29) must equal 94.                        |
| VV135 | PRECRASH LOCATION (V29) equals 01                      | PRECRASH VEHICLE CONTROL(V28) should equal 01 or 04.          |
| VV170 | PRECRASH VEHICLE CONTROL (V28) equals 00               | PRECRASH LOCATION (V29) must equal 00.                        |
| VV172 | PRECRASH VEHICLE CONTROL (V28) is not equal to 00      | PRECRASH LOCATION (V29) must not equal 00.                    |
| VV233 | MOVEMENT PRIOR TO CRITICAL<br>EVENT (V21) equals 00    | PRECRASH VEHICLE CONTROL (V28) must equal 00 or 94.           |
| VV234 | PRECRASH VEHICLE CONTROL<br>(V28) equals 00            | PRECRASH LOCATION (V29) must equal 00.                        |
| VV242 | PRECRASH CONTROL (V28) equals 01                       | ACCIDENT TYPE (V23) must not equal 02, 07, 34, 36, 54, or 56. |

**V28** 

IF



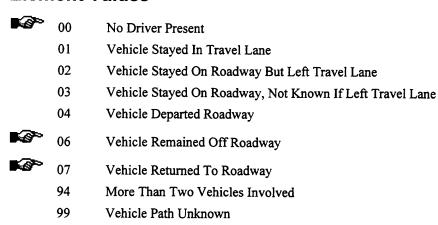
ACCIDENT TYPE (V23) equals 01 or 06

#### **THEN**

PRECRASH CONTROL (V28) must not equal 02, 03, 04, or 98

# ► V29 Precrash Location (Precrash 5)

#### **Element Values**



#### Remarks



The variable identifies the path of this vehicle prior to its first involvement in the crash sequence. It also further reports the results of the vehicle's stability coded in variable V28 (Precrash Vehicle Control).



Enter "00" (No Driver Present) when there is no driver present in the vehicle just prior to its involvement in the crash (D01, Driver Presence, equals "0").

Enter "01" (Vehicle Stayed In Travel Lane) when the "majority" (50% or more) of the vehicle remained within the boundaries of its initial travel lane.

Enter "02" (Vehicle Stayed on Roadway But Left Travel Lane) when the vehicle departed its initial travel lane, however, the "majority" (50% or more) of the vehicle remained within the boundaries of the roadway (travel lanes). If 50% or more of the vehicle stayed on the roadway (while leaving the travel lane) use this code.



Enter "03" (Vehicle Stayed On Roadway, Not Known If Left Travel Lane) when it is known that the vehicle remained on the roadway but it cannot be determined whether the majority (50% or more) of the vehicle remained within its initial travel lane.



Code "04" (Vehicle Departed Roadway) whenever the "majority" (50% or more) of the vehicle departed the roadway prior to the first harmful event. The departure must not be the result of a previous impact.

- Code "06" (Vehicle Remained Off Roadway) when the vehicle was off the roadway at the time of the critical event, and did not return to the roadway prior to this vehicle's first harmful event. This includes traveling on the shoulders, within the median, on the roadside, or off the trafficway. In order to code this value, the first harmful event for this vehicle cannot occur on the roadway.
- Enter "07" (Vehicle Returned To Roadway) when the vehicle was off the roadway at the time of the critical event, but prior to this vehicle's first harmful event, entered or returned to the roadway.
- Enter "94" (More Than Two Vehicles Involved) whenever there are more than two vehicles involved in this accident (A03, Number of Motor Vehicles, is greater than "02").
- Enter "99" (Vehicle Path Unknown) when this vehicle is a hit-and-run and no information is available. Also, enter this value when there is not enough information to code the path of this vehicle prior to the vehicle's involvement in the accident.

## **Consistency Check**

| <b>■</b> ∕355 | AV186 | IF RELATION TO ROADWAY (A10)   | THEN  PRECRASH LOCATION (V29) should             |
|---------------|-------|--|--|
|               |       | equals 3 or 8 and CORRECTIVE<br>ACTION ATTEMPTED (V27) is not<br>equal to 00 or 94 or 99 | equal 04.  |
|               | VA181 | PRECRASH LOCATION (V29) equals 04  | RELATION TO ROADWAY (A10) should not equal 1.    |
|               | VA182 | PRECRASH LOCATION (V29) equals 01, 02, or 03   | RELATION TO ROADWAY (A10) should equal 1.        |
|               | VA183 | PRECRASH LOCATION (V29) equals 02  | NUMBER OF TRAVEL LANES (A12) should not equal 1. |
|               | VA216 | PRECRASH LOCATION (V29) equals 06  | RELATION TO ROADWAY (A10) should not equal 1.    |
|               | VA217 | PRECRASH LOCATION (V29) equals 07  | RELATION TO ROADWAY (A10)<br>should equal I.     |
|               | VV131 | PRECRASH VEHICLE CONTROL<br>(V28) does not equal 94                                      | PRECRASH LOCATION (V29) must not equal 94.       |
|               | VV133 | PRECRASH VEHICLE CONTROL<br>(V28) equals 94  | PRECRASH LOCATION (V29) must equal 94.           |
|               | VV134 | PRECRASH LOCATION (V29) equals 00  | CORRECTIVE ACTION ATTEMPTED (V27) must equal 00. |

**V29** 

|       | IF  | THEN   |
|-------|---|--|
| VV135 | PRECRASH LOCATION (V29)<br>equals 01              | PRECRASH VEHICLE CONTROL (V28) should equal 01 or 04.      |
| VV136 | PRECRASH LOCATION (V29)<br>equals 94              | MOVEMENT PRIOR TO CRITICAL EVENT (V21) must equal 994.     |
| VV137 | PRECRASH LOCATION (V29) does<br>not equal 94      | MOVEMENT PRIOR TO CRITICAL EVENT (V21) must not equal 994. |
| VV170 | PRECRASH VEHICLE CONTROL<br>(V28) equals 00       | PRECRASH LOCATION (V29) must equal 00.                     |
| VV172 | PRECRASH VEHICLE CONTROL (V28) is not equal to 00 | PRECRASH LOCATION (V29) must not equal 00.                 |
| VV234 | PRECRASH VEHICLE CONTROL<br>(V28) equals 00       | PRECRASH LOCATION (V29) must equal 00.                     |
| VV235 | PRECRASH LOCATION (V29) equals 00                 | MOVEMENT PRIOR TO CRITICAL EVENT (V21) must equal 00.      |

# V30 Rollover Type

#### **Element Values**

| 00 | No Rollover                          |  |
|----|--------------------------------------|--|
| 10 | Untripped Rollover                   |  |
| 20 | Tripped Rollover - By Curb           |  |
| 21 | Tripped Rollover - By Guardrail      |  |
| 22 | Tripped Rollover - By Ditch          |  |
| 23 | Tripped Rollover - By Soft Soil      |  |
| 28 | Tripped Rollover - Other             |  |
| 29 | Tripped Rollover - Unknown Mechanism |  |

Rollover, Unknown Whether Untripped Or Tripped

#### Remarks

99

Enter "00" (No Rollover) if uncertainty exists concerning whether or not this vehicle rolled over. In addition, use this code if a trailer attached to the vehicle rolled over but the vehicle itself did not. Further, this element includes vehicles whose Body Type (V5) is "80-89" (Motored Cycle) independent of their accident configuration. When these vehicles rotate sufficiently to contact the ground it is considered an "overturn" rather than a rollover.

Enter "10" (Untripped Rollover) when a rollover occurs but it is not the result of a collision but rather vehicle instability (e.g., centrifugal force).

Rollovers primarily about the lateral axis (end-over-end) should be coded using "28" (Tripped Rollover - Other). Codes "20" through "29" are used for tripped rollovers primarily about the longitudinal axis.

Enter "22" (Tripped Rollover - By Ditch) when there is contact with a ditch prior to the rollover, or the PAR states that a vehicle entered a ditch prior to the rollover. Also, use this code whenever "ditch" is referenced in relation to the rollover and no further information is available.

Enter "28" (Tripped Rollover - Other) when the rollover is a tripped rollover and the tripping mechanism is not included in codes "20" through "23".

Enter "29" (Tripped Rollover - Unknown Mechanism) when the rollover is initiated by a tripping mechanism but the specific mechanism is unknown.

Enter "99" (Rollover, Unknown Whether Tripped or Untripped) when it is known that the vehicle rolled over but it is not known whether it was a tripped or untripped rollover.

# **Consistency Check**

|          | AV149 | FIRST HARMFUL EVENT (A6) equals 01 and there is no BODY TYPE (V5) equal to 80-89 | THEN at least one ROLLOVER TYPE (V30) must equal 10, 20-23, 28, 29, or 99. |
|----------|-------|--|--|
|          | AV214 | If FIRST HARMFUL EVENT (A6) or MOST HARMFUL EVENT (V20) equals 38                | ROLLOVER TYPE (V30) should equal 00 or 22.                                 |
|          | VV111 | BODY TYPE (V5) equals 80-89  | ROLLOVER TYPE (V30) must equal 00.   |
|          | VV116 | MOST HARMFUL EVENT (V20) equals 01 and BODY TYPE (V5) does not equal 80-89       | ROLLOVER TYPE (V30) must not equal 00.                                     |
|          | VV121 | ACCIDENT TYPE (V23) equals 97  | ROLLOVER TYPE (V30) must equal 10.   |
|          | VV138 | ROLLOVER TYPE (V30) is not equal to 00   | DAMAGE AREAS (V25) should have more than one value other than 0.           |
|          | VV226 | ROLLOVER TYPE (V30) equals 10  | ACCIDENT TYPE (V23) must not equal 98.                                     |
| <b>₽</b> | VV247 | ROLLOVER TYPE (V30) equals 10  | ACCIDENT TYPE (V23) should equal 01-10, 14, 97, or 99.                     |

V30

# National Governors Association (NGA) Accident Data

## Introduction

In 1987 the nation's Governors adopted a comprehensive motor carrier safety policy which stated that a necessary first step toward improved motor carrier safety would be the uniform collection of information on truck and bus accidents. The NGA surveyed fifty states to assemble the latest police accident reports, and conducted case study field visits to four states to get a better understanding of data collection and reporting. After reviewing state truck and bus accident data collection efforts, the NGA drafted a set of uniform data elements. These data elements were pilot tested in several states and finalized.

The final recommended data elements can be divided into two groups. The first group contains elements and which pertain specifically to accidents involving trucks and buses. These elements provide essential information required to analyze motor carrier accidents and are not relevant to other accidents.

Variables V31 - V36 include that portion of the NGA data elements which pertain specifically to accidents involving trucks and busses.

Variables V31 - V36 are only applicable when the vehicle body type is a medium/heavy truck or bus (V05 = 50 - 79).

# V31 Carrier's Identification Number

## **Element Values**

Range

000000 - 999999

000000

Not Applicable

000001 - 999998

US DOT or ICC MC Number

999999

Unknown

## Remarks

The Carrier's ID is the unique number assigned to the Carrier by the United States Department of Commerce Commission, or the State.

This number will be found only on vehicles of interstate for-hire or private carriers in the transportation business. The number can be either a US DOT number (on interstate private carriers) or an ICC MC number (interstate for-hire carriers).

Enter "000000" (Not Applicable) when the vehicle is not a medium/heavy truck or a bus [Body Type (V05) not equal to "50 - 79"]. This code should also be used when the vehicle is a medium/heavy truck or a bus but the vehicle is not an interstate for-hire or private carrier.

Enter "99999" (Unknown) when the vehicle is a medium/heavy truck or a bus [Body Type (V05) equals "50 - 79"] but the Carrier ID is not known. Also, use this code when the body type is unknown (V05 equals "99").

| ,     |   | V31   |
|-------|---|---|
| VV109 | <b>IF</b> BODY TYPE (V5) equals 50-64, 66-79                                | THEN CARRIER'S IDENTIFICATION NUMBER (V31) should not equal 000000. |
| VV110 | BODY TYPE (V5) is not equal to 50-64, 66-79 or 99                           | CARRIER'S IDENTIFICATION NUMBER (V31) must equal 000000.            |
| VV140 | CARRIER'S IDENTIFICATION NUMBER (V31) is not equal to 000000                | NUMBER OF AXLES ON VEHICLE, INCL TRAILERS (V32) must not equal 00.  |
| VV167 | BODY TYPE (V5) equals 99  | CARRIER'S IDENTIFICATION NUMBER (V31) must equal 999999.            |
| VV223 | CARRIER'S IDENTIFICATION<br>NUMBER (V31) does not equal<br>000000 or 999999 | BODY TYPE (V5) must equal 50-64, 66-79 or 99.                       |

# V32 Number of Axles on Vehicle, Including Trailers

## **Element Values**

00 Not Applicable

02-20 Actual Number Of Axles99 Unknown Number Of Axles

## Remarks

Enter "00" (Not Applicable) when the vehicle is not a medium/heavy truck or a bus, [Body Type (V05) is not equal to "50-79"].

Enter "99" (Unknown Number of Axles) when the body type is unknown (V05 equals "99").

|       |  | V32  |
|-------|--|--|
|       | iF   | THEN   |
| VV115 | VEHICLE TRAILING (V13) equals 4 or 9 and BODY TYPE (V05) equals 50, 59-64, 66-79 | NUMBER OF AXLES ON VEHICLE, INCL TRAILERS (V32) must not equal 00.   |
| VV140 | CARRIER'S IDENTIFICATION NUMBER (V31) is not equal to 000000                     | NUMBER OF AXLES ON VEHICLE, INCL TRAILERS (V32) must not equal 00.   |
| VV141 | NUMBER OF AXLES ON<br>VEHICLE, INCL TRAILERS (V32)<br>equals 00                  | CARGO BODY TYPE (V33) must equal 00.                                 |
| VV142 | NUMBER OF AXLES ON<br>VEHICLE, INCL TRAILERS (V32)<br>is not equal to 00         | CARGO BODY TYPE (V33) must not equal 00.                             |
| VV165 | BODY TYPE (V5) is not equal to 50-64, 66-79 or 99                                | NUMBER OF AXLES ON<br>VEHICLE, INCL TRAILERS (V32)<br>must equal 00. |

| VV166 | IF BODY TYPE (V5) equals 99  | THEN NUMBER OF AXLES ON VEHICLE, INCL TRAILERS (V32) must equal 99.               |
|-------|--|---|
| VV219 | BODY TYPE (V5) equals 50, 59-64, 66-79 or 99                             | NUMBER OF AXLES ON VEHICLE, INCL TRAILERS (V32) must not equal 00.                |
| VV244 | BODY TYPE (V5) equals 66 or 78<br>and VEHICLE TRAILING (V13)<br>equals 0 | NUMBER OF AXLES ON VEHICLE,<br>INCL TRAILERS (V32) should equal<br>02, 03, or 99. |

# V33 Cargo Body Type

## **Element Values**

- 00 Not Applicable
- 01 Bus
- 02 Van/Enclosed Box
- 03 Cargo Tank
- 04 Flatbed
- 05 Dump
- 06 Concrete Mixer
- 07 Auto Transporter
- 08 Garbage/Refuse
- 98 Other
- 99 Unknown Cargo Body Type

## Remarks

Enter "00" (Not Applicable) when the vehicle is not a medium/heavy truck or a bus [Body Type (V05) does not equal "50 - 79"].

Enter "98" (Other) when the vehicle is known to be a medium/heavy truck or a bus [Body Type (V05) equals "50-79"] but the cargo body type is other than those described in codes "01" through "08". Also, use this code when the medium/heavy truck [Body Type (V05) equal to "66"] is a truck-tractor with no trailer attached (e.g., a "bobtail" truck).

This code may also be used when the medium/heavy truck or bus is a fire truck, a medium/heavy tow truck, or a bus based motorhome.

Enter "99" (Unknown) when the vehicle is known to be a medium/heavy truck or a bus [Body Type (V05) equals "50-79"] but the specific cargo body type is not known. Also, use this code when the body type is unknown (V05 equals "99").

| VV141 | IF NUMBER OF AXLES ON VEHICLE, INCL TRAILERS (V32) equals 00             | THEN CARGO BODY TYPE (V33) must equal 00.            |
|-------|--|--|
| VV142 | NUMBER OF AXLES ON<br>VEHICLE, INCL TRAILERS (V32)<br>is not equal to 00 | CARGO BODY TYPE (V33) must not equal 00.             |
| VV143 | CARGO BODY TYPE (V33) equals 00  | HAZARDOUS MATERIALS<br>PLACARDED (V34) must equal 0. |
| VV145 | CARGO BODY TYPE (V33) equals 01  | BODY TYPE (V5) must equal 50, 58, or 59.             |
| VV163 | BODY TYPE (V5) equals 99   | CARGO BODY TYPE (V33) must equal 99.                 |
| VV164 | BODY TYPE (V5) is not equal to 50-64, 66-79 or 99                        | CARGO BODY TYPE (V33) must equal 00.                 |
| VV174 | VEHICLE TRAILING (V13) equals 0 and BODY TYPE (V5) equals 66             | CARGO BODY TYPE (V33) must equal 98.                 |
| VV185 | CARGO BODY TYPE (V33) equals 98 and BODY TYPE (V5) equals 66             | VEHICLE TRAILING (V13) should equal 0.               |
| VV220 | BODY TYPE (V5) equals 50, 59-64, 66-79 or 99                             | CARGO BODY TYPE (V33) must not equal 00.             |
| VV221 | BODY TYPE (V5) equals 60-79 and SPECIAL USE (V8) equals 07               | CARGO BODY TYPE (V33) must equal 98.                 |
| VV248 | BODY TYPE (V5) equals 50 or 59   | CARGO BODY TYPE (V33) must equal 01.                 |
| VV249 | BODY TYPE (V5) equals 58   | CARGO BODY TYPE (V33) must equal 01 or 98.           |

# V34 Hazardous Materials Placarded

## **Element Values**

- 0 Not Applicable
- 1 Yes
- 2 No
- 9 Unknown

## Remarks

Enter "0" (Not Applicable) when the vehicle is not a medium/heavy truck or a bus [Body Type (V05) does not equal "50 - 79"]. Also, use this code when the vehicle is a medium/heavy truck or a bus [Body Type (V05) equals "50-79"], the PAR has a Hazardous Materials related block, and 'None' is indicated, or the PAR indicates that Hazardous Materials were not being transported by this vehicle (e.g. an empty truck).

Enter "1" (Yes) when the vehicle is a medium/heavy truck or a bus [Body Type (V05) equals "50 - 79"], and the PAR indicates that Hazardous Materials were being transported by this vehicle, and this vehicle was displaying a HazMat Placard.

Enter "2" (No) when the vehicle is a medium/heavy truck or a bus [Body Type (V05) equals "50 - 79"], and the PAR indicates that Hazardous Materials were being transported by this vehicle, and this vehicle was not displaying a HazMat Placard.

Enter "9" (Unknown) when the vehicle is a medium/heavy truck or a bus [Body Type (V05) equals "50-79"], and the PAR does not have a Hazardous Materials related block, and the narrative does not mention any such materials (default) OR the PAR indicates Hazardous Materials were being transported by this vehicle, but does not indicate whether a HazMat Placard was displayed, OR the Hazardous Materials related block has been left blank.

Also, enter this code when the body type is unknown [V05 equals "99"].

| otonoy |  | V34  |
|--------|--|--|
|        | IF   | THEN   |
| VV143  | CARGO BODY TYPE (V33) equals 00                              | HAZARDOUS MATERIALS PLACARDED (V34) must equal 0.                |
| VV146  | HAZARDOUS MATERIALS<br>PLACARDED (V34) equals 0 or 2         | HAZARDOUS MATERIALS<br>PLACARD NUMBER (V35) must<br>equal 00000. |
| VV147  | HAZARDOUS MATERIALS PLACARDED (V34) is not equal to 0 or 2   | HAZARDOUS MATERIALS PLACARD NUMBER (V35) must not equal 00000.   |
| VV152  | HAZARDOUS MATERIALS<br>PLACARDED (V34) equals 1              | HAZARDOUS MATERIALS<br>RELEASE (V36) must not equal 0.           |
| VV157  | BODY TYPE (V5) equals 99                                     | HAZARDOUS MATERIALS<br>PLACARDED (V34) must equal 9.             |
| VV158  | HAZARDOUS MATERIALS PLACARDED (V34) equals 1 or 9            | HAZARDOUS MATERIALS PLACARD NUMBER (V35) must not equal 00000.   |
| VV159  | HAZARDOUS MATERIALS<br>PLACARDED (V34) equals 9              | HAZARDOUS MATERIALS<br>PLACARD NUMBER (V35) must<br>equal 99999. |
| VV160  | BODY TYPE (V5) equals 66 and VEHICLE TRAILING (V13) equals 0 | HAZARDOUS MATERIALS<br>PLACARDED (V34) must equal 0.             |
| VV168  | HAZARDOUS MATERIALS RELEASE (V36) equals 0                   | HAZARDOUS MATERIALS PLACARDED (V34) must equal 0.                |

BODY TYPE (V5) is not equal to 60, 64, 66-79 or 99

VV169

HAZARDOUS MATERIALS

PLACARDED (V34) must equal 0.

# V35 Hazardous Materials Placard Number

## **Element Values**

00000

Not Applicable

00001-99998 Actual Number

99999

Unknown

## Remarks

Enter "00000" (Not Applicable) when the vehicle is not a medium/heavy truck or a bus [Body Type (V05) does not equal "50 - 79"]. Also, use this code when the vehicle is a medium/heavy truck or a bus [Body Type (V05) equals "50-79"], the PAR has a Hazardous Materials related block, and 'None' is indicated, OR the PAR indicates that Hazardous Materials were not being transported by this vehicle (e.g. an empty truck).

Enter the actual number when given on the PAR. This vehicle must be a medium/heavy truck or a bus [Body Type (V05) equals "50-79"].

Enter "99999" (Unknown) when the vehicle is a medium/heavy truck or a bus [Body Type (V05) equals "50 - 79"], and the PAR does not have a Hazardous Material related block, and the narrative does not mention any such materials (default).

Use this code when the vehicle is a medium/heavy truck or a bus [Body Type (V05) equals "50-79"], and a placard is indicated, but the placard number is not given, OR it is unknown if a placard was present [Hazardous Materials Placarded (V34) equals "9"], OR the Hazardous Materials related block has been left blank.

Also, use this code when the body type is unknown [V05 equals "99"].

|       |  | V35  |
|-------|--|--|
| VV146 | IF HAZARDOUS MATERIALS PLACARDED (V34) equals 0 or 2           | THEN HAZARDOUS MATERIALS PLACARD NUMBER (V35) must equal 00000.      |
| VV147 | HAZARDOUS MATERIALS PLACARDED (V34) is not equal to 0 or 2     | HAZARDOUS MATERIALS PLACARD NUMBER (V35) must not equal 00000.       |
| VV148 | HAZARDOUS MATERIALS<br>PLACARD NUMBER (V35) equals<br>00000    | HAZARDOUS MATERIALS<br>RELEASE (V36) should equal 0.                 |
| VV149 | HAZARDOUS MATERIALS PLACARD NUMBER (V35) is not equal to 00000 | HAZARDOUS MATERIALS RELEASE (V36) must not equal 0.                  |
| VV153 | BODY TYPE (V5) equals 66 and VEHICLE TRAILING (V13) equals 0   | HAZARDOUS MATERIALS<br>PLACARD NUMBER (V35) must<br>equal 00000.     |
| VV158 | HAZARDOUS MATERIALS PLACARDED (V34) equals 1 or 9              | HAZARDOUS MATERIALS<br>PLACARD NUMBER (V35) must not<br>equal 00000. |
| VV159 | HAZARDOUS MATERIALS PLACARDED (V34) equals 9                   | HAZARDOUS MATERIALS<br>PLACARD NUMBER (V35) must<br>equal 99999.     |
| VV161 | BODY TYPE (V5) equals 99                                       | HAZARDOUS MATERIALS<br>PLACARD NUMBER (V35) must<br>equal 99999.     |
| VV162 | BODY TYPE (V5) is not equal to 60, 64,66-79 or 99              | HAZARDOUS MATERIALS<br>PLACARD NUMBER (V35) must<br>equal 00000.     |

# V36 Hazardous Materials Release

## **Element Values**

- 0 Not Applicable
- 1 Yes
- 2 No
- 9 Unknown

#### Remarks

This variable indicates whether or not any hazardous cargo was released from the vehicle cargo tank or compartment.

Enter "0" (Not Applicable) when the vehicle is not a medium/heavy truck or a bus [Body Type (V05) does not equal "50 - 79"]. Also, use this code when the vehicle is a medium/heavy truck or a bus [Body Type (V05) equals "50-79"], the PAR has a Hazardous Materials related block, and 'None' is indicated, OR the PAR indicates that Hazardous Materials were not being transported by this vehicle (e.g. an empty truck).

Enter "1" (Yes) when the vehicle is a medium/heavy truck or a bus [Body Type (V05) equals "50-79"], and the PAR indicates that Hazardous Materials were being transported by this vehicle, and a release (spill) from the vehicle is indicated.

**NOTE:** Spilled gasoline from a fuel tank is not considered a Hazardous Material Release.

Enter "2" (No) when the vehicle is a medium/heavy truck or a bus [Body Type (V05) equals "50-79"], and the PAR indicates a cargo of Hazardous Materials, but does not indicate a release or spill.

Enter "9" (Unknown) when the vehicle is a medium/heavy truck or a bus [Body Type (V05) equals "50-79"], and the PAR does not have a Hazardous Materials related block, and the narrative does not mention any such materials (default).

Use this code when the PAR indicates that a release or spill occurred, but it is unknown if the material was hazardous.

Also, use this code when the body type is unknown [V05 equals "99"].

| ,,,,, |  | V36  |
|-------|--|--|
|       | IF   | THEN   |
| VV148 | HAZARDOUS MATERIALS PLACARD NUMBER (V35) equals 00000                | HAZARDOUS MATERIALS<br>RELEASE (V36) should equal 0.   |
| VV149 | HAZARDOUS MATERIALS<br>PLACARD NUMBER (V35) is not<br>equal to 00000 | HAZARDOUS MATERIALS<br>RELEASE (V36) must not equal 0. |
| VV152 | HAZARDOUS MATERIALS<br>PLACARDED (V34) equals 1                      | HAZARDOUS MATERIALS<br>RELEASE (V36) must not equal 0. |
| VV154 | BODY TYPE (V5) is not equal to 60, 64, 66-79 or 99                   | HAZARDOUS MATERIALS<br>RELEASE (V36) must equal 0.     |
| VV155 | BODY TYPE (V5) equals 99   | HAZARDOUS MATERIALS RELEASE (V36) must equal 9.        |
| VV156 | BODY TYPE (V5) equals 66 and VEHICLE TRAILING (V13) equals 0         | HAZARDOUS MATERIALS<br>RELEASE (V36) must equal 0.     |
| VV168 | HAZARDOUS MATERIALS<br>RELEASE (V36) equals 0                        | HAZARDOUS MATERIALS PLACARDED (V34) must equal 0.      |

# **D01 Driver Presence**

## **Element Values**

- 0 Unattended Vehicle (No Driver Involved)
- 1 Driver Operated Vehicle
- 2 Hit and Run (Vehicle and/or Driver Left Scene)
- 9 Unknown Driver Presence

## Remarks

This variable serves to identify driverless motor vehicles in-transport.

Enter "0" [Unattended Vehicle (No Driver Involved)] if no driver was physically in the in-transport vehicle at the time that it was involved in the accident. If no driver was present, then no Person Form is required. A child sitting in the driver's seat does not automatically indicate that the child was operating the vehicle (see discussion under Element "1").

Enter "1" (Driver Operated Vehicle) when the PAR lists a driver's name or element "2" (Driver Left Scene) below does not apply. Do not automatically code "1" when a child is sitting in the driver's seat. The PAR must indicate that the child was controlling the vehicle in some manner to consider the child a driver.

Enter "2" [Hit and Run (Vehicle and/or Driver Left Scene)] when this motor vehicle was a "hit-and-run" vehicle [i.e., V02, Hit & Run, is encoded "1" (Yes, Driver Or Car & Driver Left Scene)]. If it is known that the driver operated the vehicle but the PAR is unclear or inadequate regarding the issue of hit-and-run, then default to element "1" (Driver Operated Vehicle).

Enter "9" (Unknown Driver Presence) when it is unknown if there was a driver present in the vehicle. This element includes instances when a person was present in the in-transport vehicle, but it is unknown if the person was the driver.

D01

| AD026 | IF PEDESTRIAN/BIKE ACCIDENT TYPE (A24) equals 0210                 | THEN at least one DRIVER PRESENCE (D1) must equal 0.  |
|-------|--|---|
| DP001 | DRIVER PRESENCE (D1) equals 0, 9                                   | there must not be a Person Level form<br>for that vehicle with PERSON TYPE<br>(P3) equal to 1.            |
| DP004 | DRIVER PRESENCE (D1) equals 1                                      | there must be one and only one<br>Person Level form for that vehicle<br>with PERSON TYPE (P3) equal to 1. |
| DP141 | DRIVER PRESENCE (D1) equals 9                                      | at least one PERSON TYPE (P3) must equal 9.   |
| PP062 | A previous occupant has been identifie can be coded as the driver. | ed as the driver. Only one occupant   |
| VV186 | DRIVER PRESENCE (D1) equals 0                                      | DRIVER'S VISION OBSCURED BY (D4) must equal 00.   |
| VV187 | DRIVER PRESENCE (D1) equals 0                                      | DRIVER MANEUVERED TO AVOID (D6) must equal 00.  |
| VV188 | DRIVER PRESENCE (D1) equals 0                                      | VIOLATIONS CHARGED (D2) must equal 00.  |
| VV189 | DRIVER PRESENCE (D1) equals 0                                      | DRIVER DISTRACTED BY (D7) must equal 00.  |
| VV190 | DRIVER PRESENCE (D1) equals 0                                      | VEHICLE ROLE (V22) should not equal 0 or 9.   |
| VV191 | DRIVER PRESENCE (D1) equals 0                                      | ACCIDENT TYPE (V23) must equal 00, 04, 09, 15, 32, 42, 48, 52, 62, 66, 74, 84, 90, or 98.                 |
| VV192 | NUMBER OF OCCUPANTS (V10) equals 00                                | DRIVER PRESENCE (D1) must equal 0.  |
| VV193 | JACKKNIFE (V14) equals 1   | DRIVER PRESENCE (D1) must not equal 0.  |

| VV194 | IF VEHICLE CONTRIBUTING FACTOR (V12) equals 50      | THEN DRIVER PRESENCE (D1) must equal 2.               |
|-------|---|---|
| VV198 | DRIVER PRESENCE (D1) equals 2                       | HIT AND RUN (V2) must equal 1.                        |
| VV202 | HIT AND RUN (V2) equals 1                           | DRIVER PRESENCE (D1) must equal 2.                    |
| VV231 | DRIVER PRESENCE (D1) equals 0                       | MOVEMENT PRIOR TO CRITICAL EVENT (V21) must equal 00. |
| VV236 | MOVEMENT PRIOR TO CRITICAL<br>EVENT (V21) equals 00 | DRIVER PRESENCE (D01) must equal 0.                   |

# **D02 Violations Charged**

## **Element Values**

| 00 | None  |
|----|---|
| 01 | Alcohol Or Drugs                            |
| 02 | Speeding                                    |
| 03 | Alcohol Or Drugs And Speeding               |
| 04 | Reckless Driving                            |
| 05 | Driving With A Suspended Or Revoked License |
| 06 | Failure To Yield Right-of-Way               |
| 07 | Running A Traffic Signal Or Stop Sign       |
| 50 | Hit & Run (And No Information)              |
| 97 | Violation Charged - No Details              |
| 98 | Other Violation                             |
| 99 | Unknown If Charged                          |

## Remarks

Enter "00" (None) when there are no charges, the applicable section is blank or crossed out on the PAR, or charges are "pending". In addition, use this element when D01, Driver Presence, is encoded "0" [Unattended Vehicle (No Driver Involved)].

Element "01" or "02", and "04" through "07" are prioritized in decreasing numerical value (e.g., "01" or "02" takes precedence over "04", "04" takes precedence over "05", etc.).

Element "03" (Alcohol Or Drugs And Speeding) is special in that it is a combination of elements "01" (Alcohol Or Drugs) and "02" (Speeding). Enter "03" if the driver is cited for alcohol/drugs and speeding and another violation.

Enter "02" (Speeding) if the driver is cited for any violation which lists speed as a factor (i.e., "x" amount over the limit, too fast for conditions, etc.)

Enter "04" (Reckless Driving) if the driver is charged with reckless driving or driving to endanger. It should be recognized that careless driving and reckless driving are not the same. If the PAR indicates "careless driving" and does not indicate driving to endanger, reckless driving should not be coded.

Enter "06" (Failure To Yield) if this driver is charged with: "failure to yield ...." (in any of its multitudinous forms).

Enter "50" [Hit & Run (and No Information)] when the driver and/or vehicle left the scene and there is no indication on the PAR that any violations were charged.

Enter "97" (Violation Charged - No Details) when a violation has been charged but there is a lack of information regarding the specific nature of the violation. For example, a violation number cannot be matched, a violation number is not legible or the PAR indicates that two violations were charged but there is no other information.

Enter "98" (Other Violation) if this driver is charged with: "following too closely or failure to keep proper distance", or any other violation designated by the State as a moving violation. In addition, use when the PAR indicates a violation was charged that can be identified but cannot be classified in elements "01" through "07" above.

Enter "99" (Unknown If Charged) when the PAR specifically indicates unknown or is unclear concerning whether or not a violation was issued; see element "00" (None) regarding a statement of "pending".

|       |   | D02   |
|-------|---|---|
|       | IF  | THEN  |
| AD043 | PEDESTRIAN/BIKE ACCIDENT<br>TYPE (A24) equals 0760                    | at least one VIOLATIONS<br>CHARGED (D2) should not equal<br>00.   |
| DA123 | VIOLATIONS CHARGED (D2) equals 07                                     | TRAFFIC CONTROL DEVICE (A16) should equal 01 09, 21, 97, 98, or 99.   |
| DP095 | VIOLATIONS CHARGED (D2) equals 01 and PERSON TYPE (P3) equals 1       | either POLICE REPORTED<br>ALCOHOL INVOLVEMENT (P11)<br>or POLICE REPORTED DRUG<br>INVOLVEMENT (P17) must equal<br>1 or 7. |
| DP122 | VIOLATIONS CHARGED (D2)<br>equals 03 and PERSON TYPE (P3)<br>equals 1 | either POLICE REPORTED<br>ALCOHOL INVOLVEMENT (P11)<br>or POLICE REPORTED DRUG<br>INVOLVEMENT (P17) must equal<br>1 or 7. |
| VV188 | If DRIVER PRESENCE (D1) equals 0                                      | VIOLATIONS CHARGED (D2) must equal 00.  |
| VV197 | VIOLATIONS CHARGED (D2) equals 50                                     | HIT AND RUN (V2) must equal 1.  |

# **D04 Driver's Vision Obscured By**

# **Element Values**

| 00 | No Obstruction  |
|----|---|
| 01 | Rain, Snow, Smoke, Sand, Dust   |
| 02 | Reflected Glare, Bright Sunlight, Headlights                                |
| 03 | Curve Or Hill   |
| 04 | Building, Billboard, Or Other Design Features (Includes Signs, Embankment). |
| 05 | Trees, Crops, Vegetation  |
| 06 | Moving Vehicle (Including Load)   |
| 07 | Parked Vehicle  |
| 08 | Splash Or Spray Of Passing Vehicle  |
| 09 | Inadequate Defrost Or Defog System  |
| 10 | Inadequate Lighting System  |
| 11 | Obstruction Interior To The Vehicle   |
| 12 | External Mirrors  |
| 13 | Head Restraints   |
| 14 | Broken Or Improperly Cleaned Windshield                                     |
| 15 | Fog   |
| 50 | Hit-And-Run (And No Information)  |
| 97 | Vision Obscured - No Details  |
| 98 | Other Obstruction   |
| 99 | Unknown Whether Vision Was Obscured   |

## Remarks

This variable attempts to identify visual circumstances that may have contributed to the cause of the accident. These circumstances ("visual obstructions") can appear anywhere on the PAR--in the narrative section, in the violations section, in a column entitled "Contributing Factors" or "Driver Action", etc. Do not consider driver or witness statements unless verified by the investigating police officer.

If two or more visual obstructions apply, enter the element of lowest numerical value.

Enter "00" (No Obstruction) when the PAR indicates that there were no visual obstructions for this driver. In addition, use this element when D01, Driver Presence, is encoded "0" [Unattended Vehicle (No Driver Involved)].

Elements "01" through "15" are selected if indicated on the PAR.

Enter "06" [Moving Vehicle (Including Load)] if the vehicle was in motion (on a trafficway).

Enter "07" (Parked Vehicle) if the vehicle was not in motion (i.e., in-transport or not in-transport).

Enter "09" (Inadequate Defrost or Defog System) when the presence of frost or fog on the windshield was due to an inadequate system. The PAR must state specifically that the system was not operating properly. The presence of frost or fog alone on the windshield should be coded "14" (Broken or Improperly Cleaned Windshield).

Enter "15" (Fog) when the ongoing weather condition was described as "fog". Do not use this code when only the vehicle windshield is described as "fogged". The choice of code "09" or "14" should be dependent upon whether the defrost/defog system is noted as not functioning.

Enter "50" [Hit & Run (And No Information)] if the PAR specifically indicates unknown in a section that concerns driver vision and the driver is coded "2" [Hit & Run (Vehicle and/or Driver Left Scene)] in variable D1, Driver Presence. However, if the PAR reports a vision impediment (subsequently determined by the police after the driver left the scene) for a hit-and-run driver, then enter the indicated element rather than this element. This includes entering the element "00" (No Obstruction) if so indicated on the PAR.

Enter "97" (Vision Obscured - No Details) when the PAR indicates that "some" vision impediment exists but does not clearly indicate the nature of the impediment.

Enter "98" (Other Obstruction) when the PAR indicates a vision impediment that cannot be attributed to one of the other elements above ("01" through "15").

Enter "99" (Unknown Whether Vision Was Obscured) when the PAR indicates that the driver's field of view (visual field) at the time of the accident is unknown and the driver did not leave the scene [i.e., encoded "2" [Hit & Run (Vehicle and/or Driver Left Scene)] on variable D01, Driver Presence].

|       | IF  | THEN   |
|-------|---|--|
| AD034 | PEDESTRIAN/BIKE ACCIDENT<br>TYPE (A24) equals 0007                | at least one DRIVER'S VISION<br>OBSCURED BY (D4) must equal 07<br>or 11. |
| AD088 | PEDESTRIAN/BIKE ACCIDENT<br>TYPE (A24) equals 0821, 0822,<br>0829 | at least one DRIVER'S VISION OBSCURED BY (D4) must not equal 00.         |
| AD091 | ROADWAY SURFACE<br>CONDITION (A15) equals 1                       | DRIVER'S VISION OBSCURED BY (D4) should not equal 08.                    |
| AD150 | ATMOSPHERIC CONDITION (A20) equals 1                              | DRIVER'S VISION OBSCURED BY (D4) must not equal 15.                      |
| AD154 | PEDESTRIAN/BIKE ACCIDENT<br>TYPE (A24) equals 0006                | at least one DRIVER'S VISION OBSCURED BY (D4) must equal 00.             |
| DA124 | DRIVER'S VISION OBSCURED<br>BY (D4) equals 01                     | ATMOSPHERIC CONDITION (A20) should not equal 1.                          |
| DA159 | DRIVER'S VISION OBSCURED<br>BY (D4) equals 15                     | ATMOSPHERIC CONDITION (A20) should equal 5, 6, 7, or 9.                  |
| DA160 | DRIVER'S VISION OBSCURED<br>BY (D4) equals 15                     | ATMOSPHERIC CONDITION (A20) must not equal 1.                            |
| VV186 | DRIVER PRESENCE (D1) equals 0                                     | DRIVER'S VISION OBSCURED BY (D4) must equal 00.                          |
| VV199 | DRIVER'S VISION OBSCURED<br>BY (D4) equals 50                     | HIT AND RUN (V2) must equal 1.   |
| VV204 | HIT AND RUN (V2) equals 1   | DRIVER'S VISION OBSCURED BY (D4) must not equal 99.                      |
| VV208 | NUMBER OF OCCUPANTS (V10) equals 00                               | DRIVER'S VISION OBSCURED BY (D4) must equal 00.                          |

# **D06 Driver Maneuvered To Avoid**

## **Element Values**

- 00 Driver Did Not Maneuver To Avoid
- 01 Object In Road
- O2 Poor Road Conditions (Puddle, Ice, Pothole, Etc.)
- 03 Animal In Road
- 04 Vehicle In Road
- 05 Pedestrian, Pedalcyclist, Or Other Non-Motorist In Road
- 50 Hit & Run (And No Information)
- 97 Avoidance Maneuver No Details
- 99 Unknown If Driver Maneuvered To Avoid

#### Remarks

This variable attempts to identify an action taken by the driver to avoid something or someone in the road. The maneuver may have subsequently contributed to the cause of the accident. Code the appropriate value whether the maneuver was successful or not (i.e., whether or not the driver was able to avoid the person or object).

If the person or object is off the road when the maneuver takes place then this action should not be coded here (a driver who leaves the road and swerves to avoid a pedestrian on the sidewalk would not be coded as an avoidance maneuver here).

Do not consider driver or witness statements unless verified by the investigating police officer.

If two or more elements apply, enter the element of lowest numerical value.

Enter "00" (Driver Did Not Maneuver To Avoid) when the preponderance of the information on the PAR indicates that there were no avoidance type maneuvers made by the driver prior to the First Harmful Event. In addition, use this element when D01, Driver Presence, is encoded "00" [Unattended Vehicle (No Driver Involved)].

Additionally, use this value when the object avoided was a "phantom vehicle". A "phantom vehicle" is a vehicle alleged by the driver to have been involved but which the reporting officer cannot substantiate.

Elements "01" through "05" are selected if indicated on the PAR.

Enter "02" [Poor Road Conditions (Puddle, Ice, Pothole, etc.)] when the driver maneuvered to avoid the location of a road condition. Treat the condition as if it were an object.

Do not use this code if the driver lost control while traveling on/over the road condition but made no maneuver to avoid it.

Enter "50" [Hit & Run (And No Information)] if the PAR specifically indicates unknown in this driver's vehicle or environmental related section and the driver is coded "02" [Hit & Run (Vehicle and/or Driver Left Scene)] in variable D01, Driver Presence. However, if the PAR reports a maneuver to avoid (subsequently determined by the police after the driver left the scene) for a hit-and-run driver, then enter the indicated element rather than this element. This includes entering the element "00" (Driver Did Not Maneuver To Avoid) if the preponderance of the evidence on the PAR so indicates.

Enter "97" (Avoidance Maneuver - No Details) when the PAR indicates that some action was taken by the driver to avoid something or someone in the road but does not clearly indicate what this person or thing was.

Enter "99" (Unknown If Driver Maneuvered To Avoid) when the PAR indicates it is unknown whether or not a nonvisual environmentally related problem existed at the time of the accident and the driver did not leave the scene [i.e., encoded "2" (Driver Left Scene) on variable D01, Driver Presence].

# **Consistency Check**

|       |  | D06   |
|-------|--|---|
| VV187 | IF DRIVER PRESENCE (D1) equals 0                                     | THEN DRIVER MANEUVERED TO                                 |
|       |  | AVOID (D6) must equal 00.                                 |
| VV195 | ACCIDENT TYPE (V23) equals 03, 08, 34, 36, 38, 40, 54, 56, 58, or 60 | DRIVER MANEUVERED TO AVOID (D6) must not equal 00.        |
| VV200 | DRIVER MANEUVERED TO<br>AVOID (D6) equals 50                         | HIT AND RUN (V2) must equal 1.                            |
| VV205 | HIT AND RUN (V2) equals 1  | DRIVER MANEUVERED TO AVOID (D6) must not equal 99.        |
| VV209 | NUMBER OF OCCUPANTS (V10) equals 00                                  | DRIVER MANEUVERED TO AVOID (D6) must equal 00.            |
| VV211 | DRIVER MANEUVERED TO<br>AVOID (D6) equals 03                         | CRITICAL EVENT (V26) should equal 830, 831, 859 or 994.   |
| VV212 | DRIVER MANEUVERED TO<br>AVOID (D6) equals 05                         | CRITICAL EVENT (V26) should equal 800-829 or 994.         |
| VV213 | DRIVER MANEUVERED TO<br>AVOID (D6) equals 00                         | MOVEMENT PRIOR TO CRITICAL EVENT (V21) must not equal 18. |
| VV214 | DRIVER MANEUVERED TO<br>AVOID (D6) equals 04                         | CRITICAL EVENT (V26) should equal 500-799 or 994.         |

**D06** 

|       | IF   | THEN  |
|-------|--|---|
| VV215 | DRIVER MANEUVERED TO<br>AVOID (D6) equals 01           | CRITICAL EVENT (V26) should equal 840, 841, 859 or 994. |
| VV217 | MOVEMENT PRIOR TO<br>CRITICAL EVENT (V21) equals<br>18 | DRIVER MANEUVERED TO AVOID (D6) should not equal 00.    |
| VV218 | CORRECTIVE ACTION ATTEMPTED (V27) equals 00            | DRIVER MANEUVERED TO AVOID (D6) should equal 00 or 50.  |

# **D07** Driver Distracted By

## **Element Values**

| <b>J</b> U | Not Distracted or N/A  |
|------------|--|
| )1         | Passengers, Occupants  |
| )2         | Vehicle Instrument Display (Radio, Cassette, CB, Heating/AC) |
| )3         | Phone  |
| )4         | Other Internal Distractions                                  |
| )5         | Other Accident ("Rubbernecking")                             |
| 06         | Other External Distractions                                  |
| 50         | Hit & Run (And No Information)                               |
| 97         | Distraction - No Details                                     |
| 99         | Unknown If Distracted  |

## Remarks

This variable attempts to capture distractions which may have influenced driver performance and contributed to the cause of the accident. The distractions can be either inside the vehicle (internal) or outside the vehicle (external). In order to qualify as a distraction the occurrence must be classified on the PAR as a "distraction" or be described as having interrupted the drivers normal attention to the roadway. Just the presence of a phone, for instance, does not necessarily classify it as a distraction.

If two or more distractions apply, enter the element of lowest numerical value.

Enter "00" (Not Distracted or N/A) when it is specifically indicated on the PAR that the driver was not distracted. Use this code, also, when there is no mention of a driver distraction being involved in the accident (this is the default value).

Elements "01" through "04" are used when the distraction is internal and elements "05" and "06" are used when the distraction is external.

Enter "01" (Passenger, Occupants) when distraction can be intentional or unintentional on the part of the passenger/occupant. It can be the result of movement, conversation or any other activity which draws the attention of the driver from the road.

Enter "02" [Vehicle Instrument Display (Radio, Cassette, CB, Heating/AC)] when the PAR indicates that any object or control, located on the instrument panel, was involved in distracting the driver. Included here are auditory distractions originating from the instrument panel (ex. radio, warning indicator noise, etc.).

If the driver was lighting a cigarette, using the lighter from the instrument panel, this code should be used (lighting a cigarette using matches would be coded "04").

Element "04" (Other Internal Distractions) should be used when a distraction inside the vehicle exists which is not included in codes "01" through "03". "Internal" includes any person or thing which is physically located inside the vehicle. This also includes any mental distractions, internal to the driver (ex. daydreaming) which were noted on the PAR.

Enter "05" [Other Accident ("Rubbernecking")] when specifically noted on the PAR or when the driver is noted to have been looking at another accident just prior to the First Harmful Event.

Enter "06" (Other External Distraction) when code "05" does not apply and a distraction is noted which is outside of the vehicle (ex. buildings, billboards, moving/parked vehicles).

A subtle distinction must be made here between distractions and obstructions. A distraction draws the drivers attention away from the road ahead. An obstruction blocks the drivers view of the road ahead or of an area of the environment where visual input is needed. For example, when a driver cannot see crossing traffic at an intersection because of a billboard at the corner, the sign is an obstruction and not a distraction. If, on the other hand, the driver looks at the sign because of its interesting art work, and impacts another vehicle, then the sign becomes an external distraction (code "06").

Enter "50" [Hit & Run (And No Information)] when the driver and/or the vehicle left the scene of the accident and there is no information regarding a distraction.

Enter "97" (Distraction - No Details) when a distraction is noted on the PAR but there is not enough information to select from codes "01" through "06".

|       |                                     | D07  |
|-------|-------------------------------------|--|
|       | IF                                  | THEN   |
| VV189 | DRIVER PRESENCE (D1) equals 0       | DRIVER DISTRACTED BY (D7) must equal 00.           |
| VV196 | DRIVER DISTRACTED BY (D7) equals 01 | NUMBER OF OCCUPANTS (V10) must be greater than 01. |
| VV201 | DRIVER DISTRACTED BY (D7) equals 50 | HIT AND RUN (V2) must equal 1.                     |
| VV206 | HIT AND RUN (V2) equals 1           | DRIVER DISTRACTED BY (D7) must not equal 99.       |
| VV210 | NUMBER OF OCCUPANTS (V10) equals 00 | DRIVER DISTRACTED BY (D7) must equal 00.           |

# **D08 Driver's ZIP Code**

## **Element Values**

Range\* (first, second, and third characters):

000,004-098,100-212, 214-268, 270-340, 342, 344, 346-347, 349-352, 354-397,399-418, 420-427, 430-516, 520-528, 530-532, 534-535, 537-551, 553-567, 570-577, 580-588, 590-607, 609-620, 622-631, 633-641, 644-658, 660-662, 664-681, 683-693, 700-701, 703-708,710-714, 716-731, 733-741,743-816, 820-838, 840-847, 850,852-853,855-857, 859-860,863-865, 870-875, 877-885, 889-891,893-895, 897-898, 900-928, 930-999

00000 Not Resident of US or Territories/Driver not present Code actual 5-digit zip code

99999 Unknown

\*Range is a compilation of Section 6 of the 1994 National Five Digit Zip Code & Post Office Directory, Volume 2 N-W

#### Remarks

For the purposes of this variable, a driver is considered to reside at the address listed on the police accident report. This address was most likely taken from the driver's license given to the police officer and/or from the licensing state's drivers license file.

If the driver's address is present and the ZIP code is missing or not available, then determine the correct ZIP code by using the two volume National Five Digit Zip Code & Post Office Directory.

Code "00000" (Not Resident of US Territories/Driver Not Present) is used when the address found on the PAR indicates that the driver resides at an address which has not been assigned a ZIP code by the US Post Office. This code is also used when an in-transport vehicle is involved in the accident but no driver was in the vehicle at the time.

Code "99999" (Unknown) is used whenever the ZIP cannot be determined. For example, use this code when no information is provided on the PAR about the driver because he was a "hit-and-run" driver. In addition, use this code if the driver, licensed or not, has no permanent address. For example, the driver could be living out of his/her vehicle (camper, motorhome, etc.), or the driver could be "homeless".

If a ZIP CODE is listed on the PAR but it is not a valid number use this code.

**D08** 

IF

VV216

NUMBER OF OCCUPANTS (V10) equals 00

**THEN** 

DRIVER'S ZIP CODE (D8) must equal 00000.

# **P01 Vehicle Number**

## **Element Values**

Form: Occupant & Non-Motorist

Range: 01 through 30

(Computer Assigned Number)

## **Remarks**

## **Occupant Form**

The data for each occupant are entered by vehicle, in numerical order, starting with vehicle 01.

Assume that only one occupant is in a hit-and-run vehicle (unless reliable evidence to the contrary exists), and assume this person is the driver.

## **Non-Motorist Form**

All Non-Motorists are assigned Vehicle Number 00.

# **P02 Person Number**

# **Element Values**

Form: Occupant & Non-Motorist

Range: 01 through 50

(Computer assigned number)

## Remarks

Occupant, pedestrian, or nonmotorist numbers are assigned sequentially, beginning with "01"; no numbers are skipped. Numbers are assigned in accordance with the PAR's assignment unless a number is skipped. In most cases the numbering will follow the seat position, starting with the left front and moving left to right and front to back.

Persons appended to vehicle for motion (e.g., bicyclist holding onto vehicle) are either pedestrians or other nonmotorists; they are not occupants.

Drivers do not have to be coded "01" (e.g., right hand drive vehicles containing left front occupant). However, code the assumed driver of a hit-and-run vehicle as "01".

# P03 Person Type

## **Element Values**

Form: Occupant & Non-Motorist

#### **Values**

- 1 Driver Of A Motor Vehicle In-Transport (Occupant)
- 2 Passenger Of A Motor Vehicle In-Transport (Occupant)
- 3 Occupant Of A Motor Vehicle Not In-Transport (Non-Motorist)
- 4 Occupant Of A Nonmotor Vehicle Transport Device (Non-Motorist)
- 5 Nonoccupant Pedestrian (Non-Motorist)
- 6 Nonoccupant Cyclist/Pedalcyclist (Non-Motorist)
- 8 Nonoccupant Other Or Unknown (Non-Motorist)
- 9 Unknown Occupant Type In A Motor Vehicle In-Transport (Occupant)

## Remarks

#### **Occupant Form**

Hit-and-run vehicles are assumed to have only one occupant (unless reliable evidence to the contrary exists), and that person is assumed to be the driver. All other persons riding in or on the vehicle are considered to be passengers.

Enter "9" (Unknown Occupant Type In A Motor Vehicle In-Transport) when it is unknown whether this occupant was a driver or passenger.

#### **Non-Motorist Form**

Enter "3" (Occupant Of A Motor Vehicle Not In-Transport) when a person is in or on a motor vehicle which is not in-transport when struck.

Enter "4" (Occupant of a Non-motor Vehicle Transport Device) when a person is associated with either (1) an animal or (2) a nonmotorist conveyance.

Association with an animal means that the nonmotorist was either riding on an animal or in an animal powered conveyance.

A nonmotorist conveyance is defined as any human-powered device by which a nonmotorist may move, or by which a pedestrian or nonmotorist may move another nonmotorist, other than by pedaling. A nonmotorist conveyance includes the following: baby carriage, coaster wagon, ice skates, roller skates, push cart, scooter, skate board, skis, sled, wheelchair, rickshaw, etc. This includes those persons in a nonmotorist conveyance who hold onto a motor vehicle in motion. Excluded are pedalcyclists.

Enter "5" (Non-occupant / Pedestrian) when the nonmotorist is a pedestrian. A Pedestrian is defined as any person who is on a trafficway or on a sidewalk or path contiguous with a trafficway, and who is not in or on a nonmotorist conveyance. This includes persons who are in contact with the ground, roadway, etc., but who are holding onto a vehicle.

Enter "6" [Non-occupant / Cyclist (Pedalcyclist)] when the nonmotorist is a bicyclist or other cyclist (generically a pedalcyclist). A bicyclist refers to only those pedalcyclists who were either a driver or passenger on a bicycle. This includes those bicyclists who hold onto a motor vehicle in motion. Other cyclist refers to all other pedalcyclists (tricyclist, unicyclist, etc.). This includes those pedalcyclists who hold onto a motor vehicle in motion. A "Big Wheel" should be treated as a tricycle.

Enter "8" (Non-occupant / Other Or Unknown) when the nonmotorist is any other person not included under the above definitions. For example, enter this value for any person outside a trafficway or outside a sidewalk or path contiguous with a trafficway.

# **Consistency Check**

|       |  | PU3   |
|-------|--|---|
| AP005 | IF FIRST HARMFUL EVENT (A6) equals 21  | THEN at least one person must have PERSON TYPE (P3) equal to 4 or 5.                                    |
| AP006 | FIRST HARMFUL EVENT (A6) equals 22   | at least one person must have PERSON TYPE (P3) equal to 6 or 8.   |
| AP008 | FIRST HARMFUL EVENT (A6) equals 06   | at least one PERSON TYPE (P3) equal to 1-2, 9 must have INJURY SEVERITY (P9) equal to 1 5.              |
| AP015 | NUMBER OF MOTOR VEHICLES (A3) is greater than 00                                     | at least one PERSON TYPE (P3) should equal 1, 2 or 9.   |
| AP021 | PEDESTRIAN/BIKE ACCIDENT<br>TYPE (A24) equals 0000                                   | PERSON TYPE (P3) must not equal 5, 6, or 8.   |
| AP023 | RELATION TO JUNCTION (A9) equals 01 or 11 and at least one PERSON TYPE (P3) equals 5 | PEDESTRIAN/BIKE ACCIDENT<br>TYPE (A24) must not equal 0810,<br>0821, 0822, 0829, 0830, 0840 or<br>0890. |
| AP024 | SCHOOL BUS RELATED (A21) equals 1 and PERSON TYPE (P3) equals 5                      | PEDESTRIAN/BIKE ACCIDENT<br>TYPE (A24) should equal 0120.   |
| AP027 | PEDESTRIAN/BIKE ACCIDENT<br>TYPE (A24) equals 0120 and<br>PERSON TYPE (P3) equals 5  | SCHOOL BUS RELATED (A21) must equal 1.  |

P03

| AP039 | IF RELATION TO JUNCTION (A9) equals 01, 02, 11 or 12, and at least one PERSON TYPE (P3) equals 5                  | THEN PEDESTRIAN/BIKE ACCIDENT TYPE (A24) should equal 0710, 0720, 0730, 0740, 0750, 0760, 0790.  |
|-------|---|--|
| AP040 | RELATION TO ROADWAY (A10) is not equal to 1 and at least one PERSON TYPE (P3) equals 5                            | PEDESTRIAN/BIKE ACCIDENT<br>TYPE (A24) should equal 0610,<br>0620, 0910, or 0920.  |
| AP054 | TRAFFIC CONTROL DEVICE (A16) equals 01, 04, 08, 09, 21, 22, 28, or 29, and at least one PERSON TYPE (P3) equals 6 | PEDESTRIAN/BIKE ACCIDENT<br>TYPE (A24) should equal 0005,<br>0006, 0007, 0009, 0010, 0012, 0018,<br>0019, 0021 0024, 0048, 0049, 0054,<br>or 0055. |
| AP061 | PEDESTRIAN/BIKE ACCIDENT<br>TYPE (A24) equals 0520 and<br>PERSON TYPE (P3) equals 5                               | NON MOTORIST'S ACTION (P19) must equal 21 or 22.   |
| AP077 | PEDESTRIAN/BIKE ACCIDENT<br>TYPE (A24) equals 0420  | at least one PERSON TYPE (P3) must equal 4.  |
| AP128 | FIRST HARMFUL EVENT (A6) equals 27  | at least one PERSON TYPE (P3) must equal 4 or 8.   |
| AP155 | PEDESTRIAN/BIKE ACCIDENT<br>TYPE (A24) equals 9999  | at least one PERSON TYPE (P3) must equal 8.  |
| DP001 | DRIVER PRESENCE (D1) equals 0, 9  | there must not be a Person Level form for that vehicle with PERSON TYPE (P3) equal to 1.   |
| DP004 | DRIVER PRESENCE (D1) equals 1   | there must be one and only one<br>Person Level form for that vehicle<br>with PERSON TYPE (P3) equal to 1.  |
| DP095 | VIOLATIONS CHARGED (D2) equals 01 and PERSON TYPE (P3) equals 1   | either POLICE REPORTED<br>ALCOHOL INVOLVEMENT (P11)<br>or POLICE REPORTED DRUG<br>INVOLVEMENT (P17) must equal 1<br>or 7.                          |
| DP122 | VIOLATIONS CHARGED (D2) equals 03 and PERSON TYPE (P3) equals 1   | either POLICE REPORTED ALCOHOL INVOLVEMENT (P11) or POLICE REPORTED DRUG INVOLVEMENT (P17) must equal 1 or 7.                                      |

| DP141 | IF DRIVER PRESENCE (D1) equals 9   | <b>THEN</b> at least one PERSON TYPE (P3) must equal 9.  |
|-------|--|--|
| PA049 | at least one PERSON TYPE (P3) equals 5   | PEDESTRIAN/BIKE ACCIDENT<br>TYPE (A24) must equal 0110-0150,<br>0210-0230, 0310-0330, 0410-0430,<br>0510-0539, 0610, 0620, 0710-0790,<br>0810-0890, 0910, or 0920. |
| PA051 | PERSON TYPE (P3) equals 5 and<br>NON MOTORIST LOCATION<br>(P13) equals 08, 18, or 98 | PEDESTRIAN/BIKE ACCIDENT<br>TYPE (A24) should equal 0610 or<br>0620.   |
| PA053 | NON MOTORIST LOCATION (P13) equals 01, 02, 08, or 09 and PERSON TYPE (P3) equals 5   | PEDESTRIAN/BIKE ACCIDENT<br>TYPE (A24) should equal 0710,<br>0720, 0730, 0740, 0750, 0760, or<br>0790.   |
| PA058 | at least one PERSON TYPE (P3) equals 6   | PEDESTRIAN/BIKE ACCIDENT<br>TYPE (A24) must equal 0001-0041,<br>0048, 0049, 0055, 0097, 0098, or<br>0099.  |
| PA083 | PERSON'S PHYSICAL<br>IMPAIRMENT (P18) equals 04 and<br>PERSON TYPE (P3) equals 4     | the first character of PEDESTRIAN/BIKE ACCIDENT TYPE (A24) must equal 1.   |
| PA096 | PERSON TYPE (P3) equals 5 or 6   | PEDESTRIAN/BIKE ACCIDENT TYPE (A24) must not equal 0000.   |
| PA201 | PERSON TYPE (P3) equals 3 8 and<br>NUMBER OF MOTOR VEHICLES<br>(A3) equals 01        | NON MOTORIST STRIKING<br>VEHICLE NUMBER (P22) must<br>equal 01.  |
| PP002 | PERSON TYPE (P3) equals 1  | SEATING POSITION (P4) must not equal 21-53.  |
| PP009 | PERSON TYPE (P3) equals 2, 9   | SEATING POSITION (P4) should not equal 11.   |
| PP018 | PERSON TYPE (P3) equals 1  | SEATING POSITION (P4) should not equal 12 19.  |
| PP034 | PERSON TYPE (P3) equals 1  | RESTRAINT SYSTEM USE (P15) must not equal 6.   |
| PP040 | PERSON TYPE (P3) equals 4 or 6   | NON MOTORIST'S ACTION (P19) must not equal 21-29.  |

|       | IF  | THEN  |
|-------|---|---|
| PP041 | PERSON TYPE (P3) equals 5 or 8  | NON MOTORIST'S ACTION (P19) must not equal 01-10.               |
| PP045 | PERSON TYPE (P3) equals 2 and<br>RESTRAINT SYSTEM USE (P15)<br>equals 1-3, 6, 8, or 9 | EJECTION (P6) should equal 0.                                   |
| PP046 | PERSON TYPE (P3) equals 2   | PERSON'S PHYSICAL<br>IMPAIRMENT (P18) must equal 00.            |
| PP047 | PERSON TYPE (P3) equals 2 or 3  | POLICE REPORTED ALCOHOL INVOLVEMENT (P11) must equal 0.         |
| PP048 | PERSON TYPE (P3) equals 2 or 3  | POLICE REPORTED DRUG<br>INVOLVEMENT (P17) must equal<br>0.      |
| PP061 | NON MOTORIST SAFETY<br>EQUIPMENT USE (P20) equals 1<br>or 3                           | PERSON TYPE (P3) should equal 6.                                |
| PP062 | A previous occupant has been identified be coded (P3 = 1) as the driver.              | ed as the driver. Only one occupant can                         |
| PP068 | PERSON TYPE (P3) equals 3   | NON MOTORIST'S ACTION (P19) must equal 00.                      |
| PP072 | PERSON TYPE (P3) equals 1, 2, or 9  | NON MOTORIST SAFETY<br>EQUIPMENT USE (P20) must equal<br>0.     |
| PP073 | PERSON TYPE (P3) equals 3   | NON MOTORIST SAFETY<br>EQUIPMENT USE (P20) must equal<br>0.     |
| PP081 | PERSON TYPE (P3) equals 3   | NON MOTORIST LOCATION (P13) should not equal 01, 02, 11, or 12. |
| PP082 | NON MOTORIST STRIKING<br>VEHICLE NUMBER (P22) equals<br>00                            | PERSON TYPE (P3) must not equal 3 8.                            |

|       | IF   | THEN   |
|-------|--|--|
| PP083 | NON MOTORIST STRIKING<br>VEHICLE NUMBER (P22) is equal<br>to 01-30, or 99  | PERSON TYPE (P3) must not equal 1, 2, or 9.                      |
| PP085 | PERSON'S PHYSICAL<br>IMPAIRMENT (P18) equals 07  | PERSON TYPE (P3) should not equal 1.                             |
| PV001 | PERSON TYPE (P3) equals 1 and BODY TYPE (V5) equals 80-89  | SEATING POSITION (P4) must not equal 00, 12-53, or 99.           |
| PV002 | PERSON TYPE (P3) equals 2, or 9 and BODY TYPE (V5) equals 01, 02, 04, 10, 30-32, 39, 41, 90, 91  | SEATING POSITION (P4) must not equal 50 or 51.                   |
| PV005 | PERSON TYPE (P3) equals 2, or 9, and BODY TYPE (V5) equals 80 89   | SEATING POSITION (P4) must not equal 13-19, 22-53.               |
| PV007 | PERSON TYPE (P3) equals 2 and BODY TYPE (V5) equals 50-59  | SEATING POSITION (P4) must not equal 11 39, 50, 52, or 99.       |
| PV010 | PERSON TYPE (P3) equals 9 and BODY TYPE (V5) equals 50-59  | SEATING POSITION (P4) must not equal 12 50, or 52.               |
| PV011 | PERSON TYPE (P3) equals 1 and AGE (P7) is less than 08   | BODY TYPE (V5) must not equal 01-07, 09 60, 64-66, 78-79, or 93. |
| VP010 | MOST HARMFUL EVENT (V20) equals 21   | at least one PERSON TYPE (P3) must equal 4 or 5.                 |
| VP011 | MOST HARMFUL EVENT (V20) equals 22   | at least one PERSON TYPE (P3) must equal 6.                      |
| VA218 | MOVEMENT PRIOR TO<br>CRITICAL EVENT (V21) equals<br>00 and at least one PERSON TYPE<br>(P3) equals 5, and, for this person,<br>NONMOTORIST STRIKING<br>VEHICLE # (P22) equals the vehicle<br># for which V21 equals 00 | PEDESTRIAN/BIDE ACCIDENT<br>TYPE (A24) must equal 0210.          |
| VP012 | MOST HARMFUL EVENT (V20) equals 27   | at least one PERSON TYPE (P3) must equal 3, 4, or 8.             |

|       | IF  | THEN  |
|-------|---|---|
| VP013 | MOST HARMFUL EVENT (V20) equals 06  | at least one occupant of this vehicle (PERSON TYPES (P3) 1 2, 9) must have INJURY SEVERITY (P9) equal to 1-5, 9 or blank. |
| VP045 | at least one NUMBER OF<br>OCCUPANTS (V10) equals 00 and<br>at least one PERSON TYPE (P3)<br>equals 5                        | PEDESTRIAN/BIKE ACCIDENT TYPE (A24) should equal 0210 or 0320.  |
| VP046 | at least one MOVEMENT PRIOR<br>TO CRITICAL EVENT (V21)<br>equals 13 and at least one PERSON<br>TYPE (P3) equals 5           | PEDESTRIAN/BIKE ACCIDENT TYPE (A24) should equal 0220.  |
| VP047 | at least one MOVEMENT PRIOR<br>TO CRITICAL EVENT (V21)<br>equals 10-12, or 17 and at least one<br>PERSON TYPE (P3) equals 5 | PEDESTRIAN/BIKE ACCIDENT<br>TYPE (A24) should equal 0720.   |
| VP056 | MOVEMENT PRIOR TO<br>CRITICAL EVENT (V21) equals<br>11 and at least one PERSON TYPE<br>(P3) equals 6                        | PEDESTRIAN/BIKE ACCIDENT<br>TYPE (A24) should equal 0005,<br>0009, 0010, 0012, 0022, 0023, 0033,<br>0048, or 0049.        |
| VP057 | MOVEMENT PRIOR TO<br>CRITICAL EVENT (V21) equals<br>13 and at least one PERSON TYPE<br>(P3) equals 6                        | PEDESTRIAN/BIKE ACCIDENT TYPE (A24) should equal 0011.  |
| VP136 | MOVEMENT PRIOR TO<br>CRITICAL EVENT (V21) equals<br>10 and at least one PERSON TYPE<br>(P3) equals 6                        | PEDESTRIAN/BIKE ACCIDENT TYPE (A24) should equal 0005, 0009, 0010, 0012, 0024, 0034, 0048 or 0049.                        |
| VP199 | NUMBER OF OCCUPANTS (V10) is greater than 00  | there must be only one occupant coded as the driver (P3=1).   |

## **P04 Seating Position**

#### **Element Values**

Form: Occupant

#### Values

| F  | ront Seat  | S  | econd Seat | TI | hird Seat  |
|----|------------|----|------------|----|------------|
| 11 | Left side  | 21 | Left side  | 31 | Left side  |
| 12 | Middle     | 22 | Middle     | 32 | Middle     |
| 13 | Right side | 23 | Right side | 33 | Right side |
| 18 | Other      | 28 | Other      | 38 | Other      |
| 19 | Unknown    | 29 | Unknown    | 39 | Unknown    |

- 50 Sleeper Section Of Cab (Truck)
- 51 Other Passenger In Passenger Or Cargo Area
- 52 Trailing Unit
- 53 Riding On Vehicle Exterior
- 99 Unknown

#### Remarks

Seat position is coded by the location of the occupant in relation to the seat row and the forward longitudinal axis of the vehicle.

More than one person may be assigned the same seating position; however, this is allowed only when a person is sitting on someone's lap (e.g., child on or in mother's lap).

If the PAR does not specifically state that one person was on the lap of another, then see the discussion below under Elements "18", "28", or "38" (other).

In seat rows designed for only two passengers, enter elements "11", "13", "21", "23", "31", "33", or "51".

Enter "11" (Front Seat - Left Side) if there is an assumed driver of a hit-and-run vehicle unless evidence indicates a different position for the person or persons.

Elements "18", "28", or "38" (Other) and "51" (Other Passenger In Passenger Or Cargo Area) can be used to record the position of someone sitting on the floor or lying across the seat. In addition, enter these elements when two or more persons are sitting abreast of one another in the same seating location (as opposed to on or in someone's lap), since only one occupant can be assigned the seat's position. If the PAR provides enough specific information, then assign the seat position to the person using the restraint; if no restraint was used, then assign the seat position to the older person.

Enter "18" (Front Seat - Other) if the only seat in the front seating area is a driver's seat (e.g., bucket, pedestal, etc.), and the occupant was in the area but not in the seat. This situation could occur because of vehicle design or seat removal. The same logic applies to other seat areas. Enter "51" (Other Passenger In Passenger Or Cargo Area) when a person is in the fourth or higher seat row but not in a seat.

Enter "50" [Sleeper Section of Cab (Truck)] if the occupant's vehicle is a medium or heavy truck and has a cab sleeper section, and this occupant is in the sleeper section at the time of the accident.

Enter "51" (Other Passenger in Passenger or Cargo Area) when an occupant is in the fourth or higher numbered seat area, in an enclosed area where no defined seating exists, or using a fold-down type seat in its folded down position. Use, also, for bus passengers (not driver).

If seating in the vehicle is longitudinal rather than lateral, use the basic idea of a vehicle interior being divided laterally into roughly equal thirds and visualize lateral rows of seats to determine what seat position is the best descriptor. The diagram below illustrates the intended seat positions for areas of a vehicle.

For rearward facing seats use the basic idea described above in the previous paragraph to describe the occupant's seat position. For buses consider seating positions "12", "22", and "32" to be "aisles" and "13" to be a stepwell area.

If a seat row has more than three designated seat positions, the occupants should have their positions assigned as usual for the left and right positions, while the two center positions would be encoded as "Other" (i.e., "18", "28", "38", or "51") depending upon the seat row.

Persons appended to the vehicle for motion are not considered to be occupants of the vehicle.

For motorcycles, code the driver "11", sidecar passenger "12", passenger behind the driver "21" and passenger on the lap of the driver (in front of) "11".

Enter "52" (Trailing Unit) when an occupant is in or on a trailing unit [i.e., V13, Vehicle Trailing, for this occupant's vehicle must be coded "1" through "4" (Yes,.. Trailing)].

Enter "53" (Riding on Vehicle Exterior) when an occupant is riding on a fender, the boot of a convertible, the open cargo box of a light truck, etc.

|       |   | P04  |
|-------|---|--|
| PP002 | IF PERSON TYPE (P3) equals 1                            | <b>THEN</b> SEATING POSITION (P4) must not equal 21-53.          |
| PP009 | PERSON TYPE (P3) equals 2, 9                            | SEATING POSITION (P4) should not equal 11.                       |
| PP018 | PERSON TYPE (P3) equals 1                               | SEATING POSITION (P4) should not equal 12-19.                    |
| PP033 | RESTRAINT SYSTEM USE (P15) equals 1                     | SEATING POSITION (P4) should not equal 12, 22, 32, 50-53.        |
| PP044 | SEATING POSITION (P4) equals 53                         | RESTRAINT SYSTEM USE (P15) must equal 0.                         |
| PP057 | RESTRAINT TYPE (P16) equals 1                           | SEATING POSITION (P4) must not equal 12, 21-53.                  |
| PP063 | SEATING POSITION (P4) equals 12, 23-53                  | RESTRAINT TYPE (P16) must not equal 1.                           |
| PP074 | SEATING POSITION (P4) equals 12, 21-53                  | AIR BAG<br>AVAILABILITY/FUNCTION (P21)<br>must equal 0.          |
| PP075 | SEATING POSITION (P4) equals 22, 23, 31-53              | RESTRAINT SYSTEM USE (P15) must not equal 5.                     |
| PP076 | SEATING POSITION (P4) does not equal 11 or 13           | AIR BAG<br>AVAILABILITY/FUNCTION (P21)<br>must not equal 1 or 2. |
| PP077 | WARNING: For Occupants, the value POSITION (P4).        | e "00" must not be coded for SEATING                             |
| PP080 | AIR BAG<br>AVAILABILITY/FUNCTION<br>(P21) equals 1 or 2 | SEATING POSITION (P4) must not equal 12, 21-99.                  |
| PP084 | SEATING POSITION (P4) equals 50 or 53                   | RESTRAINT SYSTEM USE (P15)<br>must equal 7.                      |

|       | IF   | THEN   |
|-------|--|--|
| PV001 | PERSON TYPE (P3) equals 1 and BODY TYPE (V5) equals 80-89                                      | SEATING POSITION (P4) must not equal 00, 12-53, or 99.     |
| PV002 | PERSON TYPE (P3) equals 2, or 9 and BODY TYPE (V5) equals 01 02, 04, 10, 30-32, 39, 41, 90, 91 | SEATING POSITION (P4) must not equal 50 or 51.             |
| PV005 | PERSON TYPE (P3) equals 2, or 9, and BODY TYPE (V5) equals 80-89                               | SEATING POSITION (P4) must not equal 13-19, 22 53.         |
| PV006 | SEATING POSITION (P4) equals 52  | VEHICLE TRAILING (V13) must not equal 0.                   |
| PV007 | PERSON TYPE (P3) equals 2 and BODY TYPE (V5) equals 50 59                                      | SEATING POSITION (P4) must not equal 11-39, 50, 52, or 99. |
| PV010 | PERSON TYPE (P3) equals 9 and BODY TYPE (V5) equals 50-59                                      | SEATING POSITION (P4) must not equal 12-50, or 52.         |
| PV166 | SEATING POSITION (P4) equals 31-39   | BODY TYPE (V5) should not equal 01, 02, 03, 04, or 05.     |
| VP192 | If SEATING POSITION (P4) equals 53 and BODY TYPE (V5) does not equal 01, 06, 30-39             | EJECTION (P6) should equal 0.                              |

## P06 Ejection

#### **Element Values**

Form: Occupant

#### **Values**

0 Not Ejected



1 Totally Ejected



2 Partially Ejected



7 Eiected - No Details

9 Unknown

#### Remarks

Ejection refers to occupants being totally or partially thrown from the vehicle as a result of an impact or rollover.

Partial ejection refers to those instances where some part but not all of an occupant's body is, at some time during the accident sequence, outside the occupant compartment. Although it would not seem to be a problem it can be fatal if the part outside is the occupant's head. Because of the dynamics of the vehicle and the kinematics of the occupants during an ejection sequence, it is often the occupant's own vehicle which causes the injury as it rolls onto the occupant.



Enter "0" (Not Ejected) if the PAR specifically so states for a given occupant. For other occupants of non hit-and-run vehicle about whom the PAR is silent, enter "9". Enter "0" for occupants of a hit-and-run vehicle, unless the PAR specifically indicates that ejection occurred. Also, enter "0" for any person riding on the exterior of a vehicle such as the fenders (this does not include pickup beds, boot of a convertible, and persons riding on open tailgates.)



Enter "1" (Totally Ejected) when the occupant's body is entirely outside the vehicle but may be in contact with the vehicle.



Enter "2" (Partially Ejected) when part of the occupant's body remains in the vehicle. This does not apply to occupants who are not initially in the seating compartment of the vehicle (e.g., pickup beds, boot of a convertible, and persons riding on open tailgates, since any ejection for them is coded as "1, Totally Ejected").



Enter "7" (Ejected - No Details) when the PAR indicates that an occupant is ejected but fails to discriminate between total and partial ejection.

Enter "9" (Unknown If Ejected) when the PAR specifically indicates unknown or when the person was injured and there is no information on ejection.

|       |   | P06   |
|-------|---|---|
| PP037 | IF EJECTION (P6) equals 1, 2, or 7  | THEN RESTRAINT SYSTEM USE (P15) should equal 0, 7 or 9.                   |
| PP045 | PERSON TYPE (P3) equals 2 and<br>RESTRAINT SYSTEM USE (P15)<br>equals 1 3, 6, 8, or 9 | EJECTION (P6) should equal 0.   |
| PP058 | EJECTION (P6) equals 1, 2, or 7   | RESTRAINT TYPE (P16) should not equal 2.                                  |
| PP069 | EJECTION (P6) equals 1, 2, or 7   | INJURY SEVERITY (P9) should not equal 0.                                  |
| PP070 | EJECTION (P6) equals 1, 2, or 7   | RESTRAINT SYSTEM USE (P15) must not equal 5.                              |
| PV103 | EJECTION (P6) equals 1, 2, or 7   | this person's vehicle's MOST<br>HARMFUL EVENT (V20) must not<br>equal 06. |
| PV125 | EJECTION (P6) equals 1, 2, or 7   | BODY TYPE (V5) must not equal 80-89, 90, or 91.                           |
| VP192 | SEATING POSITION (P4) equals 53 and BODY TYPE (V5) does not equal 01, 06, 30-39       | EJECTION (P6) should equal 0.   |
| VP207 | BODY TYPE (V5) equals 80 91 and<br>NUMBER OF OCCUPANTS (V10)<br>is greater than 00    | EJECTION (P6) must equal 0.   |
| VP208 | HIT AND RUN (V2) equals 1 and MANNER OF LEAVING SCENE (V19) equals 1                  | EJECTION (P6) must equal 0.   |

# P07 Age

#### **Element Values**

Form: Occupant & Non-Motorist

Range: 00-97, 99

00 Up To One Year

97 Ninety-Seven Years Or Older

99 Unknown

#### Remarks

The person's age at the time of the accident is recorded with respect to the person's last birthday.

#### **Consistency Check**

|      | P07 |
|------|-----|
| THEN |     |

PP013 UNLIKELY: AGE (P7) is greater than 92 and not equal to 99.

RESTRAINT SYSTEM USE (P15) AGE (P7) should equal 00-04 or 99. PP036

equals 6

PERSON TYPE (P3) equals 1 and PV011 BODY TYPE (V5) must not equal 01 AGE (P7) is less than 08

# P08 Sex

#### **Element Values**

Form:

Occupant & Non-Motorist

**Values** 

Male

2 Female

9 Unknown

### Remarks

Self-explanatory.

# **P09 Injury Severity**

#### **Element Values**

| Form:  | Occupant & Non-Motorist              |
|--------|--------------------------------------|
| Values |                                      |
| 0      | No Injury (O)                        |
| 1      | Possible Injury (C)                  |
| 2      | Nonincapacitating Evident Injury (B) |
| 3      | Incapacitating Injury (A)            |
| 4      | Fatal Injury (K)                     |
| 5      | Injured, Severity Unknown            |
| 6      | Died Prior To Accident               |
| 9      | Unknown                              |

#### Remarks

Enter the police reported injury severity for this person (i.e., occupant, pedestrian, or nonmotorist). Most jurisdictions use the KABCO injury coding scheme.

K = Killed

A = Incapacitating Injury

B = Nonincapacitating Injury

C = Possible Injury

O = No Injury

If the police report contains a detailed description of the injuries but does not translate the injuries into the KABCO codes, use the police method for doing so. For example, injuries which are considered to be of an incapacitating nature are classified as "A" (element "3"),

Nonincapacitating-evident injuries are classified as "B" (element "2"), and possible injuries are "C" (element "1"). Property damage only (i.e., no injury) is classified as "O" (element "0").

Enter "5" (Injured, Severity Unknown) if the police report indicates a "U" or in any other way communicates the idea that the person was injured but the severity is unknown.

Enter "6" (Died Prior to Accident) only if the police explicitly so indicate.

As a general rule, if the PAR is "blank" where the injury severity is assessed and the person was at the scene during the police investigation, enter "0" [No Injury (O)]. If the PAR is "blank" and the person was not present during the police investigation, enter "9" (Unknown).

The following states use the KABCO injury coding scheme: Illinois (incl. Chicago), Michigan, New Mexico, North Carolina, Texas (incl. Dallas), Wisconsin, and the city of Los Angeles.

Not all states use the KABCO scheme. Listed below, by state, are alternative schemes; a mapping to the GES scheme is provided.

| State      | PAR Code/Definition                  |   | NASS Code   |
|------------|--------------------------------------|---|---|
| Alabama    | K                                    | = Killed  | K - 4   |
|            | Α                                    | = Visible or carried from scene   | A - 3   |
|            | В                                    | = Bruise/abrasion/swelling  | B - 2   |
|            | С                                    | = Not visible - has pain/faint  | C - 1   |
|            | Blank                                | = No documentation of driver or occupant injury   | Blank - 0   |
|            |                                      | = No set unknown code   |   |
| Arizona    | 5                                    | = Fatal Injury  | K - 4   |
|            | 4                                    | = Incapacitating injury   | A - 3   |
|            | 3                                    | = Non-incapacitating Evident  | B - 2   |
|            | 2                                    | = Possible Injury   | C - 1   |
|            | 1                                    | = No injury   | O - 0   |
|            | 6                                    | = Unknown   | U - 9   |
| California | 1                                    | = Fatal   | K - 4   |
|            | 2                                    | = Severe injury   | A - 3   |
|            | 3                                    | = Other visible injury  | B - 2   |
|            | 4                                    | = Complaint of pain   | C - 1   |
|            | Blank                                | = Occupant present  | O - 0   |
|            | Blank                                | = Occupant not present  | - 9   |
| Colorado*  | 5                                    | = Fatal   | K - 4   |
|            | 4                                    | = Evident - incapacitating  | A - 3   |
|            | 3                                    | = Evident - non-incapacitating  | B - 2   |
|            | 2                                    | = Possible injury   | C - 1   |
|            | 1                                    | = No injury   | O - 0   |
|            | marked 0<br>more) per<br>"Injured, : | a box at the top of the PAR indicating number of persons is and the injury code is left "blank", assume "No injury". It taining to the vehicle occupants in question and the injury of severity unknown". If "blanks" are present in both the pere box, assume "Unknown". | f the box is marked 1 (o<br>code is "blank", assume |
| Florida    | 5                                    | = Fatal (within 90 days) injury   | K - 4   |
|            | 4                                    | = Incapacitating  | A - 3   |
|            | 3                                    | = Non-Incapacitating  | B - 2   |
|            | 2                                    | = Possible  | C - 1   |
|            | 1                                    | = None  | O - 0   |

= No set unknown code

= Non-traffic fatality

- 9

- 9

6

#### Indiana

| Nature of Most<br>Severe Injury | Location of Most<br>Severe Injury | Victim's Injury          |     |
|---------------------------------|-----------------------------------|--------------------------|-----|
| I-II Any Entry                  | 1-12 Any Entry                    | 6 Dead                   | K-4 |
| 1-11 AnyEntry                   | 1-12 Any Entry                    | 2 Semiconscious          | A-3 |
|                                 |                                   | 3 Incoherent             |     |
|                                 |                                   | 4 Unconscious            |     |
| 1 Severed                       | 1-12 Any Entry                    | 1 Conscious              | A-3 |
| 2 Internal                      |                                   | 5 Shock                  |     |
| 4 Severe Burn                   |                                   | 7 Refused Med            |     |
| 7 Severe Bleed (Arterial)       |                                   |                          |     |
| 8 Fracture/Dislocation          |                                   |                          |     |
| 3 Minor Burn                    | 1-2, 4-12 Eye                     | 1 Conscious              | A-3 |
| 6 Minor Bleed                   |                                   | 5 Shock                  |     |
| 10 Complaint of Pain            |                                   | 7 Refused Med            |     |
| 11 None Visible                 |                                   |                          |     |
| 3 Minor Burn                    | 1-2, 4-12                         | 1 Conscious              | B-2 |
| 6 Minor Bleed                   | (Any EXCEPT eye)                  | 5 Shock<br>7 Refused Med |     |
| 5 Abrasion                      | 1-12 Any Entry                    | 1 Conscious              | B-2 |
| 9 Contusion/Bruise              |                                   | 5 Shock                  |     |
|                                 |                                   | 7 Refused Med            |     |
| 10 Compliant of Pain            | 1-2, 4-12                         | 1 Conscious              | C-1 |
| 11 None Visible                 | (Any EXCEPT eye)                  | 5 Shock                  |     |
|                                 |                                   | 7 Refused Med            |     |
| 11 None Visible                 | Blank or Slashed                  | 1 Conscious              | O-0 |
| Blank or Slashed                | Blank or Slashed                  | Blank or Slashed         | 0-0 |
| Unknown                         | Unknown                           | Unknown                  | U-9 |

| State PAR Code/Definition |             | NASS Code   |                |
|---------------------------|-------------|---|----------------|
| lowa                      |             |   |                |
|                           |             |   | **             |
|                           | 1<br>2      | = Fatal Injury  | K - 4          |
|                           | 3           | = Major (incapacitating)  | A - 3          |
|                           |             | = Minor (bruises and abrasions)   | B - 2          |
|                           | 4           | = Possible (complaint of pain)  | C-1            |
|                           | 0<br>Diamin | = Unknown   | U-9            |
|                           | Blank       | = No documentation of driver or occupants on back<br>of PAR                     | O - 0          |
| Kentucky                  | 1           | = Fatal   | K - 4          |
| <b></b>                   | 2           | = Incapacitating  | A - 3          |
|                           | 3           | = Non-Incapacitating  | B - 2          |
|                           | 4           | = Possible Injury   | C-1            |
|                           | 5           | = None Detected   | O - 0          |
| Maryland                  | 05<br>04    | = Fatal = Disabled (Incapacitated)  | K - 4<br>A - 3 |
|                           | 03          | = Injured - not Incapacitated   | B - 2          |
|                           | 02          | = Possible injury   | C-1            |
|                           | 01          | = Not Injured (& present)   | 0-0            |
|                           | 01          | = Not Injured (& present) = Not Known (if left scene)                           | -9             |
|                           | Blank       | <ul> <li>No documentation of driver or occupants on front<br/>of PAR</li> </ul> | -,             |
| Massachusetts             |             |   |                |
|                           | 1           | = Killed  | K - 4          |
|                           | 2           | = Serious Visible Injury  | A - 3          |
|                           | 3           | = Minor Visible Injury  | B - 2          |
|                           | 4           | = No visible injury but complaints of pain                                      | C - 1          |
|                           | Blank       | = No documentation of driver or occupants on front<br>of PAR                    | O - 0          |
|                           |             | = No set unknown code   | - 9            |

| State    | PAR Code/Definition |   | NASS Code |
|----------|---------------------|---|-----------|
| Missouri |                     |   |           |
|          | 1                   | = Fatal   | K - 4     |
|          | 2                   | = Disabling   | A - 3     |
|          | 3                   | = Evident-Not Disabling                             | B - 2     |
|          | 4                   | = Probable-Not Apparent                             | C-1       |
|          | 5                   | = None Apparent                                     | O - 0     |
|          | 6                   | = Unknown   | U - 9     |
|          |                     |   |           |
|          |                     |   |           |
| Nebraska | 1                   | = Killed  | K - 4     |
|          | _                   |   | A - 3     |
|          | 2                   | = Disabling - cannot leave scene without assistance |           |
|          | 3                   | = Visible but not disabling                         | B - 2     |
|          | 4                   | = Possible but not visible                          | C-1       |
|          | Blank               | = Occupant present                                  | O - 0     |
|          | Blank               | = Occupant not present                              | - 9       |

#### **New Jersey**

| How doiled,               |  |                                   |       |
|---------------------------|--|-----------------------------------|-------|
| Location of Injury        | Type of Injury   | Victim's Cond                     | ition |
| Any Entry                 | Any Entry  | Killed                            | K-4   |
| AnyEntry                  | Any Entry  | Incapacitated                     | A-3   |
| Any Entry                 | amputation, concussion,<br>internal,<br>fracture/dislocation | Moderate injury complaint of pain | A-3   |
| Eye                       | burn, bleeding, complaint of pain                            | Moderate injury complaint of pain | A-3   |
| Any Entry                 | bleeding, contusion bruise, abrasion                         | Moderate injury                   | B-2   |
| Any Entry<br>(EXCEPT Eye) | complaint of pain  | complaint of pain                 | C-1   |
| -                         | _  | -                                 | 0 - 0 |
| U                         | U  | U                                 | - 9   |

#### **New York**

| Location of Injury | Type of Injury   | Victim's Cond                               | lition : |
|--------------------|--|---|----------|
| Any Entry          | Any Entry  | Apparent Death                              | K-4      |
| Any Entry          | Any Entry  | Unconscious, Semi-<br>Conscious, Incoherent | A-3      |
| Any Entry          | amputation,<br>concussion, internal,<br>severe burn, moderate<br>burn,<br>fracture/dislocation | Shock, Normal                               | A-3      |
| Eye                | minor bleeding, minor<br>burn, complaint of<br>pain  | Shock, Normal                               | A-3      |
| All but eye        | minor bleeding<br>minor burn   | Shock, Normal                               | B-2      |
| Any Entry          | contusions-burise<br>abrasion  | Shock, Normal                               | B-2      |
| All but eye        | complaint of pain  | Shock, Normal                               | C-1      |
| -                  |  | -   | 0-0      |
| X                  | X  | X   | - 9      |

| State            | PAR             | Code/Definition         | NASS Code |
|------------------|-----------------|-------------------------|-----------|
| Ohio             |                 |                         |           |
|                  | 1               | = Fatal                 | K - 4     |
|                  | 2               | = Serious Visible       | A - 3     |
|                  | 3               | = Minor Visible         | B - 2     |
|                  | 4               | = No Visible Injury     | C - 1     |
|                  | 5               | = Not Injured           | O - 0     |
| Oklahoma         |                 |                         |           |
|                  | 05              | = Fatal Injury          | K - 4     |
|                  | 04              | = Incapacitating        | A - 3     |
|                  | 03              | = Non-Incapacitating    | B - 2     |
|                  | <sup>'</sup> 02 | = Possible injury       | C-1       |
|                  | 01              | = No Injury             | O - 0     |
| Pennsylvania     |                 |                         |           |
| . Cillisyivailla | 1               | = Death                 | K - 4     |
|                  | 2               | = Major Injury          | A - 3     |
|                  | 3               | = Moderate injury (and) | A - 3     |
|                  |                 | Type of Apparent Injury |           |
|                  |                 | - amputation            |           |
|                  |                 | - broken bone(s)        |           |

| State      | PAR Co | ode/Definition   | NASS Code      |
|------------|--------|--|----------------|
|            | 3      | = Moderate injury (and)  | B - 2          |
|            |        | Type of Apparent Injury  |                |
|            |        | - abrasions/contusions/bruises   |                |
|            |        | - burns  |                |
|            |        | - bleeding   |                |
|            |        | - concussion   |                |
|            |        | - other  |                |
|            | 4      | = Minor injury (and)   | C-1            |
|            |        | Type of Apparent Injury  |                |
|            |        | - complaint of pain  |                |
|            |        | - dizziness  |                |
|            |        | - shock  | 0.0            |
|            | 0      | = No injury  | O - 0          |
| Tennessee  |        |  |                |
|            | 4      | = Fatal Injury   | K - 4          |
|            | 3      | = Incapacitating Injury  | A - 3          |
|            | 2      | = Non-Incapacitating Injury  | B - 2          |
|            | 1      | = Possible injury  | C-1            |
|            | 0      | = No Injury  | O - 0          |
|            | Blank  | <ul> <li>No documentation of driver or occupants on front<br/>of PAR or on supplement</li> </ul> | O - 0          |
| Vizzinia   |        |  |                |
| Virginia   | 1      | = Dead before report made  | K - 4          |
|            | 2      | Visible signs of injury, as bleeding wound or distorted member; or had to be carried from scene  | A - 3          |
|            | 3      | <ul> <li>Other visible injury, as bruises, abrasions,<br/>swelling, limping, etc.</li> </ul>     | B - 2          |
|            | 4      | = No visible injury but complaint of pain or<br>momentary unconsciousness                        | C-1            |
| Washington |        |  |                |
| -          | 2      | = Dead at scene  | K - 4          |
|            | 3      | = Dead on arrival  | K - 4          |
|            | 4      | = Died in hospital   | K - 4          |
|            |        | = Disabling injury   | A - 3          |
|            | 5      |  |                |
|            | 5<br>6 |  | B - 2          |
|            | _      | = Non-disabling injury   | B - 2<br>C - 1 |
|            | 6      |  |                |

|       |   | P   | 09         |
|-------|---|---|------------|
|       | IF  | THEN  |            |
| AP008 | FIRST HARMFUL EVENT (A6) equals 06  | at least one PERSON TYPE (P3) equal to 1-2, 9 must have INJURY SEVERITY (P9) equal to 1-5.                              |            |
| AP098 | STRATUM (A23) equals 3  | at least one INJURY SEVERITY (P should equal 2, 3, or 4.  | 9)         |
| AP144 | STRATUM (A23) equals 4  | INJURY SEVERITY (P9) should no equal 2, 3, 4, or 5.   | ot         |
| PP011 | TAKEN TO HOSPITAL OR<br>TREATMENT FACILITY (P10)<br>equals 1  | INJURY SEVERITY (P9) should no be blank, 0, 9.  | ot         |
| AV230 | STRATUM (A23) equals 4 and at least one BODY TYPE (V5) equals 60-79                                 | no INJURY SEVERITY (P9) should equal 1, 2, 3, or 4.   |            |
| AV231 | STRATUM (A23) equals 4 and no<br>BODY TYPE (V5) equals 60-79  | no INJURY SEVERITY (P9) should equal 2, 3, or 4.  |            |
| PP015 | UNLIKELY: INJURY SEVERITY (P9) i  | s equal to 6.   |            |
| PP069 | EJECTION (P6) equals 1, 2, or 7   | INJURY SEVERITY (P9) should no equal 0.   | ot         |
| PV188 | (any) INJURY SEVERITY (P9) equals 1, 2, 3, 4, or 5 and (any) BODY TYPE (V5) equals 60-79            | STRATUM (A23) should equal 2.   |            |
| PV233 | INJURY SEVERITY (P9) equals 1<br>and at least one BODY TYPE (V5)<br>equals 60-79                    | STRATUM (A23) should not equal 4  | <b>1</b> . |
| VP013 | MOST HARMFUL EVENT (V20) equals 06  | at least one occupant of this vehicle (PERSON TYPES (P3) 1-2, 9) must have INJURY SEVERITY (P9) equ to 1-5, 9 or blank. | t          |
| VP143 | No MANNER OF LEAVING<br>SCENE (V19) equals 2 and no<br>INJURY SEVERITY (P9) equals 2,<br>3, 4, or 5 | STRATUM (A23) should equal 4.   |            |

# P10 Taken To Hospital Or Treatment Facility

#### **Element Values**

Form: Occupant & Non-Motorist

**Values** 

0 No 1 Yes

9 Unknown

#### Remarks

Enter "0" (No) when a person (i.e., occupant, pedestrian, nonmotorist) is transported to a hospital but refuses treatment. Use this element when the person is pronounced dead-at-the-scene and is transported to funeral home; however, if the person died on route to a hospital or medical facility or was pronounced dead-on-arrival at a hospital or medical facility, then enter "1" (Yes). In addition, this element includes treatment at scene such as: first aid, self-treatment, EMT treatment, doctor treatment, etc.--and the person is not transported or does not go to a treatment facility (e.g., doctor, clinic, hospital, etc.) as a result of injuries sustained in this accident.

Enter "1" (Yes) when the PAR indicates that the person goes to a hospital or treatment facility (hospital, clinic, doctor's office, etc.), and the person is examined for injuries at the facility. The person need not have been injured. The means of transportation is not a consideration.

#### **Consistency Check**

P10

PP011 TAKEN TO HOSPITAL OR
TREATMENT FACILITY (P10)
equals 1

VP234 HIT AND RUN (V2) equals 1

THEN
INJURY SEVERITY (P9) should not be blank, 0, 9.

all TAKEN TO HOSPITAL OR
TREATMENT FACLITY (P10) for this

vehicle should equal 0.

# P11 Police Reported Alcohol Involvement

#### **Element Values**

| Form:  | Occupant & Non-Motorist       |
|--------|-------------------------------|
| Values |                               |
| 0      | Alcohol Not Involved or N/A   |
| 1      | Alcohol Involved              |
| 7      | Alcohol and/or Drugs Involved |
| 8      | Not Reported                  |
| 9      | Unknown (Police Reported)     |

#### Remarks

The phrase "alcohol involved" means that the person (drivers of in-transport motor vehicles and non-motorists only) had consumed an alcoholic beverage. Involvement is not an indication that alcohol was in any way a cause of the accident, even though it may have been. If the PAR indicates that opened or unopened alcoholic beverages were found in the vehicle, then this information does not by itself constitute involvement.

Enter "0" (Alcohol Not Involved or N/A) if the investigating officer's assessment is that the person had consumed no alcohol. Also use this code for all occupants of motor vehicles in-transport who are not drivers.

Enter "1" (Alcohol Involved) if the police indicate that the person has consumed alcohol via: (1) a specific data element on the police report form, (2) the police charge the driver with DUIL, (3) the police mention in the narrative section of the report that the person had been drinking (or alcohol was present or involved, or (4) the police report has a positive BAC test result (BAC >.00).

**Enter "7" (Alcohol and/or Drugs Involved)** only if the PAR has a block which is labeled "Alcohol/Drugs", and it cannot be determined which was used. Alcohol and drugs should be assessed separately (in P11 and P17) whenever sufficient information is available to do so.

Enter "8" (Not Reported) if there is a specific location on the police report for assessment of alcohol but the investigating officer fails to make either a positive or negative assessment. If no block exists on the PAR for coding this element then use this code when no other information is available.

Enter "9" [Unknown (Police Reported)] if alcohol involvement is specifically indicated on the PAR as unknown. In general, police reports have blocks to check either positive or negative alcohol involvement. However, if a police report has provision for the investigating officer to respond "unknown involvement", then enter this element.

In addition, enter this element for hit-and-run drivers unless clear evidence to the contrary exists.

|       |  | P11   |  |
|-------|--|---|--|
|       | IF   | THEN  |  |
| AP084 | For this PSU, POLICE REPORTED ALC not equal 7.                           | OHOL INVOLVEMENT (P11) must   |  |
| AP237 | For this PSU, if POLICE REPORTED AL<br>8, then POLICE REPORTED DRUG INV  | COHOL INVOLVEMENT (P11) equals<br>OLVEMENT (P17) should equal 8.  |  |
| AP238 | For this PSU, if POLICE REPORTED DI<br>then POLICE REPORTED ALCOHOL IN   |   |  |
| AP212 | For this PSU, if POLICE REPORTED AI equals 8, then POLICE REPORTED DRU8. | COHOL INVOLVEMENT (P11) JG INVOLVEMENT (P17) must equal   |  |
| DP095 | VIOLATIONS CHARGED (D2) equals 01 and PERSON TYPE (P3) equals 1          | either POLICE REPORTED<br>ALCOHOL INVOLVEMENT (P11)<br>or POLICE REPORTED DRUG<br>INVOLVEMENT (P17) must equal 1<br>or 7. |  |
| DP122 | VIOLATIONS CHARGED (D2)<br>equals 03 and PERSON TYPE (P3)<br>equals 1    | either POLICE REPORTED<br>ALCOHOL INVOLVEMENT (P11)<br>or POLICE REPORTED DRUG<br>INVOLVEMENT (P17) must equal 1<br>or 7. |  |
| PP047 | PERSON TYPE (P3) equals 2 or 3   | POLICE REPORTED ALCOHOL INVOLVEMENT (P11) must equal 0.   |  |
| PP059 | POLICE REPORTED ALCOHOL<br>INVOLVEMENT (P11) equals 7                    | POLICE REPORTED DRUG<br>INVOLVEMENT (P17) must equal 7.   |  |
| PP060 | POLICE REPORTED DRUG<br>INVOLVEMENT (P17) equals 7                       | POLICE REPORTED ALCOHOL INVOLVEMENT (P11) must equal 7.   |  |

## **P13 Non-Motorist Location**

#### **Element Values**

| Form:<br>Values | Non-Motorist                           |
|-----------------|--|
| 01              | Intersection - In Crosswalk            |
| 02              | Intersection - On Roadway              |
| 08              | Intersection - Other                   |
| 09              | Intersection - Unknown Location        |
| 11              | Nonintersection - In Crosswalk         |
| 12              | Nonintersection - On Roadway           |
| 18              | Nonintersection - Other                |
| 19              | Nonintersection - Unknown Location     |
| 20              | In Crosswalk - Unknown If Intersection |
| 98              | Other Location                         |
| 99              | Unknown Location                       |

#### Remarks

Select the value which best represents the location of the person (i.e., pedestrian or nonmotorist) at the time of impact.

In order to use the "Intersection" elements ("01", "02", "08", and "09") the pedestrian or nonmotorist must have been struck in the area formed by the junction of two or more trafficways.

Enter "01" (Intersection - In Crosswalk) if the PAR indicates that the person was in a designated crosswalk. A crosswalk is defined as a marked area (generally delineated by solid white lines) used by persons when crossing a roadway. The crossing area must be marked to be classified as a crosswalk for the purpose of this variable. If the PAR does not show a crosswalk, then do not use this element.

Enter "02" (Intersection - On Roadway) if the person was struck in the intersection (of the roadways), or within the junction of the two trafficways outside the intersection of the two roadways but on one of the roadways. Use this element, for example, if no crosswalk is present.

Enter "08" (Intersection - Other) if the person is on a sidewalk or island within the junction of the trafficways. Sidewalk is defined as any improved surface primarily constructed for the use of pedestrians.

**Enter "09" (Intersection - Unknown)** if the person is within the junction of two trafficways but their exact location is unknown.

Elements "11", "12", "18", and "19" are applicable to accidents occurring in a non-intersection area (i.e., not within the junction of two or more named trafficways but on the "road" of a named trafficway). The junction of a driveway/alley access and a named trafficway is a nonintersection area.

Enter "11" (Non-intersection - In Crosswalk) if the person is in a crosswalk not associated with the junction of two named trafficways (e.g., a mid-block crosswalk, or a crosswalk across a named trafficway which connects a driveway).

Enter "12" (Non-intersection - On Roadway) when the PAR indicates that the person is on a roadway and not in a crosswalk and not in the junction of two named trafficways.

Enter "18" (Non-intersection - Other) when the person is struck on the "road" of a named trafficway but not on the roadway (i.e., in or out of a crosswalk). This element includes person-location areas commonly referred to as islands, shoulders, or parking lanes. This element may also include some bicycle lanes if these lanes are adjacent to the travel lanes (i.e., the roadway).

Enter "19" (Non-intersection - Unknown) if the person is not struck in the junction of two named trafficways nor on a roadway (in or out of a crosswalk).

Enter "20" (In Crosswalk - Unknown If Intersection) when it is known that the person is in a crosswalk but it is unknown if the crosswalk is associated with the junction of two named trafficways.

Enter "98" (Other Location) if the person is not struck in the junction of two named trafficways nor on the "road" of a trafficway. This element includes person-location areas commonly referred to as medians, sidewalks, or "roadside" (i.e., within the trafficway but not on the "road" and not within the junction of two or more named trafficways).

Non-Motorists who are occupants of a motor vehicle not in transport are coded with respect to the location of the vehicle.

|       | IF  | THEN   |
|-------|---|--|
| AP001 | FIRST HARMFUL EVENT (A6) equals 21, 22, or 27, and RELATION TO ROADWAY (A10) equals 1         | there must be at least one NON-MOTORIST LOCATION (P13) equal to 01-09, 11-12, 19-20, 99.           |
| AP002 | FIRST HARMFUL EVENT (A6) equals 21, 22, or 27, and RELATION TO ROADWAY (A10) equals 2         | there must be at least one NON-MOTORIST LOCATION (P13) equal to 08, 18, 98, or 99.                 |
| AP003 | FIRST HARMFUL EVENT (A6) equals 21, 22, or 27, and RELATION TO ROADWAY (A10) equals 4         | there must be at least one<br>NON-MOTORIST LOCATION (P13)<br>equal to 08, 18, 98, or 99.           |
| AP004 | FIRST HARMFUL EVENT (A6) equals 21, 22, or 27 and RELATION TO ROADWAY (A10) equals 9          | there must be at least one<br>NON-MOTORIST LOCATION (P13)<br>equal to 09, 19, 99.                  |
| AP135 | RELATION TO JUNCTION (A9) equals 03 or 13 and NUMBER OF NON-MOTORISTS (A4) is greater than 00 | NON-MOTORIST LOCATION (P13) should not equal 01, 02, 08 or 09.                                     |
| PA051 | PERSON TYPE (P3) equals 5 and<br>NON-MOTORIST LOCATION<br>(P13) equals 08, 18, or 98          | PEDESTRIAN/BIKE ACCIDENT TYPE (A24) should equal 0610 or 0620.                                     |
| PA053 | NON-MOTORIST LOCATION (P13) equals 01, 02, 08, or 09 and PERSON TYPE (P3) equals 5            | PEDESTRIAN/BIKE ACCIDENT<br>TYPE (A24) should equal 0710, 0720,<br>0730, 0740, 0750, 0760, or 0790 |

|       | (P13) equals 01, 02, 08, or 09 and PERSON TYPE (P3) equals 5   | TYPE (A24) should equal 0710, 072 0730, 0740, 0750, 0760, or 0790. |
|-------|--|--|
| PA127 | NON-MOTORIST LOCATION (P13) equals 11, 12, 18, or 19, and FIRST HARMFUL EVENT (A6) equals 21, 22 or 27 | RELATION TO JUNCTION (A9) must not equal 01 or 11.                 |
| PA130 | NON-MOTORIST LOCATION (P13) equals 01, 02, 08, or 09   | RELATION TO JUNCTION (A9) should equal 01, 02, 11, or 12.          |
| PP078 | WARNING: For Non-Motorists, the valu<br>NON-MOTORIST'S LOCATION (P13).                                 | e "00" must not be coded for                                       |
| PP081 | PERSON TYPE (P3) equals 3  | NON-MOTORIST LOCATION (PI should not equal 01, 02, 11, or 12.      |

P13

## P15 Restraint System Use

| Eleme | ent Value | S  |
|-------|-----------|--|
|       | Form:     | Occupant                                       |
|       | Values    |  |
|       | 0         | None Used or N/A                               |
|       | 1         | Lap/Shoulder Belt                              |
|       | 2         | Lap Belt                                       |
|       | 3         | Shoulder Belt                                  |
|       | 5         | Motorcycle Helmet                              |
|       | 6         | Child Safety Seat                              |
|       | 7         | None Available                                 |
|       | 8         | Restraint Used - Specifics Unknown or<br>Other |
|       | 9         | Unknown If Used                                |
|       |           |  |

#### Remarks

This variable encodes what was documented on the PAR regarding occupant use of available vehicle restraints (i.e., belts, child safety seat, or helmet). There is no differentiation here regarding the type of restraint (i.e. manual or automatic). This is accomplished using variable P16 (Restraint Type). See Table 1, under P16 (Restraint Type) for valid combinations for coding P15 (Restraint System Use)/P16 (Restraint Type).



Enter "0" (None Used or N/A) when the PAR indicates that the occupant did not use a restraint. In order to code this value, the PAR first has to indicate that there was a restraint available and that the occupant of that seat position did not use the available restraint. This code is also used when the person is a non-motorist.

Enter "1" (Lap/Shoulder Belt) when the PAR indicates that both a lap and a shoulder belt were used. Also, use this code if the PAR has a block which identifies Lap or Shoulder separately and "Lap/Shoulder" is checked.

Enter "6" (Child Safety Seat) if a child restraint is used in conjunction with shoulder and/or lap belts.



Enter "7" (None Available) when the PAR indicates that no restraint was available in the seat position of this occupant.

Use this code for persons who are riding in the sleeper section of the cab of a truck and persons who are riding on the exterior of the vehicle (Seating Position, P04, coded "50" or "53" respectively)

Enter "8" (Restraint Used - Specifics Unknown or Other) if the PAR indicates that some type of restraint was in use but the type of restraint is not clear.

Enter "9" (Unknown If Used) if there is no area on the PAR for the officer to report restraint use, or the information on the PAR is inadequate to determine restraint use.

**Note:** The presence of an air bag system does not mean that there are no active belts present. In fact, most if not all air bag equipped vehicles also have some belt restraint system installed in the seat positions protected by the air bags.

Persons such as children who are held by another person are not considered to be restrained, nor to have restraints available.

|       |   | P15  |
|-------|---|--|
| PP033 | IF RESTRAINT SYSTEM USE (P15) equals 1  | THEN SEATING POSITION (P4) should not equal 12, 22, 32, 50-53. |
| PP034 | PERSON TYPE (P3) equals 1   | RESTRAINT SYSTEM USE (P15) must not equal 6.                   |
| PP036 | RESTRAINT SYSTEM USE (P15) equals 6   | AGE (P7) should equal 00-04 or 99.                             |
| PP037 | EJECTION (P6) equals 1, 2, or 7   | RESTRAINT SYSTEM USE (P15) should equal 0, 7, or 9.            |
| PP044 | SEATING POSITION (P4) equals 53   | RESTRAINT SYSTEM USE (P15) must equal 0.                       |
| PP045 | PERSON TYPE (P3) equals 2 and<br>RESTRAINT SYSTEM USE (P15)<br>equals 1-3, 6, 8, or 9 | EJECTION (P6) should equal 0.                                  |
| PP049 | RESTRAINT SYSTEM USE (P15) equals 3   | RESTRAINT TYPE (P16) should not equal 2.                       |
| PP052 | RESTRAINT SYSTEM USE (P15) equals 6   | RESTRAINT TYPE (P16) must equal 2.                             |
| PP053 | RESTRAINT SYSTEM USE (P15) equals 0, 5, or 7  | RESTRAINT TYPE (P16) must equal 0.                             |
| PP055 | RESTRAINT SYSTEM USE (P15) equals 9   | RESTRAINT TYPE (P16) must equal<br>0.                          |

|          |       | IF   | THEN   |
|----------|-------|--|--|
|          | PP064 | RESTRAINT TYPE (P16) equals 0  | RESTRAINT SYSTEM USE (P15) must equal 0, 5, 7, or 9.     |
|          | PP065 | RESTRAINT TYPE (P16) equals 1  | RESTRAINT SYSTEM USE (P15) must equal 1, 3, or 8.        |
|          | PP066 | RESTRAINT TYPE (P16) equals 2  | RESTRAINT SYSTEM USE (P15) must not equal 0, 5, 7, or 9. |
|          | PP067 | RESTRAINT TYPE (P16) equals 9  | RESTRAINT SYSTEM USE (P15) must equal 1, 3, or 8.        |
|          | PP070 | EJECTION (P6) equals 1, 2, or 7  | EJECTION (P6) equals 1, 2, or 7                          |
|          | PP075 | SEATING POSITION (P4) equals 22, 23, 31-53   | RESTRAINT SYSTEM USE (P15) must not equal 5.             |
|          | PP084 | SEATING POSITION (P4) equals 50 or 53  | RESTRAINT SYSTEM USE (P15) must equal 7.                 |
| <b>F</b> | PV066 | RESTRAINT SYSTEM USE (P15) equals 1-3 or 6   | BODY TYPE (V5) must not equal 80-89 or 90.               |
|          | PV068 | RESTRAINT SYSTEM USE (P15) equals 5  | BODY TYPE (V5) should equal 80-90.                       |
|          | VP193 | RESTRAINT SYSTEM USE (P15) equals 1 and BODY TYPE (V5) does not equal 01-49, 79, or 99 | RESTRAINT TYPE (P16) must equal 2.                       |
|          | VP224 | BODY TYPE (V5) equals 80-90  | RESTRAINT SYSTEM USE (P15) must equal 0, 5, or 9.        |

# P16 Restraint Type

#### **Element Values**

| Form:  | Occupant            |
|--------|---------------------|
| Values |                     |
| 0      | None or N/A         |
| 1      | Automatic (Passive) |
| 2      | Manual (Active)     |
| 9      | Unknown Type        |

#### **Remarks**

This variable provides additional information about the restraint system coded in P15 (Restraint System Use), distinguishing between automatic and manual type devices used. See Table 1 for valid combinations for coding P15 (Restraint System Use)/P16 (Restraint Type).



Enter "0" (None or N/A) when the PAR indicates that the occupant did not use a restraint or no restraint was available in that seat position. Use this code when the restraint coded in P15 (Restraint System Use) was a Motorcycle Helmet. Also, use this code when P15 (Restraint System Use) is unknown.

Enter "1" [Automatic (Passive)] when an automatic type device was used by this occupant. These devices are referred to as automatic because they do not require any action on the part of the occupant to activate the device.

Enter "2" [Manual (Active)] when a manual type device was used by this person. These devices are referred to as manual because they require the person to manipulate them, in some manner, in order to activate them.

Enter "9" (Unknown Type) when a device is used but it is not known whether the device was automatic or manual.

Table P-1

| P16* |   | 0              | 1 4                 | 2                  | 9.5             |
|------|---|----------------|---------------------|--------------------|-----------------|
| P15  |   | None or<br>N/A | Automatic (Passive) | Manual<br>(Active) | Unknown<br>Type |
| 0    | None Used<br>or N/A                     | YES            | NO                  | NO                 | NO              |
| 1    | Lap/<br>Shoulder<br>Belt                | NO             | YES                 | YES                | YES             |
| 2    | Lap Belt                                | NO             | NO                  | YES                | NO              |
| 3    | Shoulder<br>Belt                        | NO             | YES                 | YES                | YES             |
| 5    | Motorcycle<br>Helmet                    | YES            | NO                  | NO                 | NO              |
| 6    | Child<br>Safety Seat                    | NO             | NO                  | YES                | NO              |
| 7    | None<br>Available                       | YES            | NO                  | NO                 | NO              |
| 8    | Restraint Used/ Specifics Unk. Or Other | NO             | YES                 | YES                | YES             |
| 9    | Unknown if used                         | YES            | NO                  | NO                 | NO              |

|          | -     |   | P16  |
|----------|-------|---|--|
|          | PP049 | IF RESTRAINT SYSTEM USE (P15) equals 3  | THEN RESTRAINT TYPE (P16) should not equal 2.            |
|          | PP052 | RESTRAINT SYSTEM USE (P15) equals 6   | RESTRAINT TYPE (P16) must equal 2.                       |
| <b>F</b> | PP053 | RESTRAINT SYSTEM USE (P15) equals 0, 5, or 7  | RESTRAINT TYPE (P16) must equal 0.                       |
|          | PP055 | RESTRAINT SYSTEM USE (P15) equals 9   | RESTRAINT TYPE (P16) must equal 0.                       |
|          | PP057 | RESTRAINT TYPE (P16) equals 1   | SEATING POSITION (P4) must not equal 12, 21-53.          |
|          | PP058 | EJECTION (P6) equals 1, 2, or 7   | RESTRAINT TYPE (P16) should not equal 2.                 |
|          | PP063 | SEATING POSITION (P4) equals 12, 23-53  | RESTRAINT TYPE (P16) must not equal 1.                   |
| Kذ       | PP064 | RESTRAINT TYPE (P16) equals 0   | RESTRAINT SYSTEM USE (P15) must equal 0, 5, 7, or 9.     |
|          | PP065 | RESTRAINT TYPE (P16) equals 1   | RESTRAINT SYSTEM USE (P15) must equal 1, 3, or 8.        |
|          | PP066 | RESTRAINT TYPE (P16) equals 2   | RESTRAINT SYSTEM USE (P15) must not equal 0, 5, 7, or 9. |
|          | PP067 | RESTRAINT TYPE (P16) equals 9   | RESTRAINT SYSTEM USE (P15) must equal 1, 3, or 8.        |
|          | PV101 | RESTRAINT TYPE (P16) equals 1   | BODY TYPE (V5) should equal 01-13, 20, or 49.            |
|          | VP193 | RESTRAINT SYSTEM USE (P15) equals 1 and BODY TYPE (V5) does not equal 01-49, 79 or 99 | RESTRAINT TYPE (P16) must equal 2.                       |
|          | VP229 | BODY TYPE (V5) equals 50-97   | RESTRAINT TYPE (P16) must not equal 1.                   |

# P17 Police Reported Drug Involvement

#### **Element Values**

| Form:  | Occupant & Non-Motorist       |
|--------|-------------------------------|
| Values |                               |
| 0      | Drugs Not Involved or N/A     |
| 1      | Drugs Involved                |
| 7      | Drugs and/or Alcohol Involved |
| 8      | Not reported                  |
| 9      | Unknown (Police Reported)     |

#### Remarks

The phrase "drugs involved" means that the person (drivers of in-transport motor vehicles and non-motorists only) had taken drugs. Involvement is not an indication that drugs were in any way a cause of the accident, even though it may have been. If the PAR indicates that drugs were found in the vehicle, then this information does not by itself constitute involvement.

Enter "0" (Drugs Not Involved or N/A) if the investigating officer's assessment is that the person had not taken drugs. Also use this code for all occupants of motor vehicles in-transport who are not drivers.

Enter "1" (Drugs Involved) if the police indicate that the person has taken drugs via: (1) a specific data element on the police report form, or (2) mention in the narrative section of the report that the person had been using drugs.

Enter "7" (Drugs and/or Alcohol Involved) only if the PAR has a block which is marked "Alcohol/Drugs", and it cannot be determined which was used. Drugs and alcohol should be assessed separately (in P11 and P17) whenever sufficient information is available to do so.

Enter "8" (Not Reported) if there is a specific location on the police report for assessment of drugs but the investigating officer fails to make either a positive or negative assessment. If no block exists on the PAR for coding this element then use this code when no other information is available.

Enter "9" [Unknown (Police Reported)] if drug involvement is specifically indicated on the PAR as unknown. A police report may only have a block to check either positive or negative drug involvement. However, if a police report has a provision for the investigating officer to respond "unknown involvement", then enter this element.

In addition, enter this element for hit-and-run drivers unless clear evidence to the contrary exists.

|          | _     |  | P17   | 7 |
|----------|-------|--|---|---|
|          |       | IF   | THEN  |   |
|          | AP085 | For this PSU, POLICE REPORTED DRU equal 7.                               |   |   |
|          | AP212 | For this PSU, if POLICE REPORTED AI equals 8, then POLICE REPORTED DRU8. |   |   |
|          | AP237 | For this PSU, if POLICE REPORTED AL<br>8, then POLICE REPORTED DRUG INV  |   | • |
| <b>K</b> | AP238 | For this PSU, if POLICE REPORTED DE<br>then POLICE REPORTED ALCOHOL IN   |   |   |
|          | DP095 | VIOLATIONS CHARGED (D2)<br>equals 01 and PERSON TYPE (P3)<br>equals 1    | either POLICE REPORTED<br>ALCOHOL INVOLVEMENT (P11)<br>or POLICE REPORTED DRUG<br>INVOLVEMENT (P17) must equal 1<br>or 7. |   |
|          | DP122 | VIOLATIONS CHARGED (D2) equals 03 and PERSON TYPE (P3) equals 1          | either POLICE REPORTED<br>ALCOHOL INVOLVEMENT (P11)<br>or POLICE REPORTED DRUG<br>INVOLVEMENT (P17) must equal 1<br>or 7. |   |
|          | PP048 | PERSON TYPE (P3) equals 2 or 3   | POLICE REPORTED DRUG<br>INVOLVEMENT (P17) must equal 0.   |   |
|          | PP059 | POLICE REPORTED ALCOHOL INVOLVEMENT (P11) equals 7                       | POLICE REPORTED DRUG<br>INVOLVEMENT (P17) must equal 7.   |   |
|          | PP060 | POLICE REPORTED DRUG<br>INVOLVEMENT (P17) equals 7                       | POLICE REPORTED ALCOHOL INVOLVEMENT (P11) must equal 7.   |   |

# P18 Person's Physical Impairment

#### **Element Values**

| Form:  | Occupant & Non-Motorist                |
|--------|--|
| Values |  |
| 00     | None                                   |
| 01     | Ill, Blackout                          |
| 02     | Drowsy, Sleepy, Fell Asleep, Fatigued  |
| 03     | Requires Cane Or Crutches              |
| 04     | Paraplegic Or Restricted To Wheelchair |
| 05     | Impaired Due To Previous Injury        |
| 06     | Deaf                                   |
| 07     | Blind                                  |
| 97     | Physical Impairment - No Details       |
| 98     | Other Physical Impairment              |
| 99     | Unknown If Physically Impaired         |

#### Remarks

This variable attempts to identify physical impairments which may have contributed to the cause of the accident. These impairments can appear anywhere on the PAR--in the narrative section, in the violations section, in a column entitled "Contributing Factors" or "Driver Action", etc. Do not consider pedestrian, nonmotorist, or witness statements unless verified by the investigating police officer.

When two or more impairments apply, enter the element of lowest numerical value.

Enter "00" (None) when the PAR indicates that there were no physical impairments for this person. Use this code, also, if this person is not a Driver or Pedestrian/Non-Motorist.

Enter "01" (III, Blackout) when indicated on the PAR. Enter this element even if the source of the illness or loss of consciousness is alcohol or drug related.

Enter "02" (Drowsy, Sleepy, Fell Asleep, Fatigued) when indicated on the PAR. Alcohol or other drugs may be the source of this impairment.

Enter "03" (Requires Cane Or Crutches) when indicated on the PAR.

Enter "04" (Paraplegic or Restricted to Wheelchair) if this person has to use a wheelchair or is paraplegic (may or may not have used a wheelchair).

Enter "05" (Impaired Due To Previous Injury) if the PAR specifically indicates this condition (e.g., pedestrian is involved in this accident subsequent to his/her involvement in a previous accident in which the pedestrian was injured). This element should be extremely rare.

Enter "06" (Deaf) when indicated on the PAR.

Enter "07" (Blind) when indicated on the PAR.

**Enter "97" (Physical Impairment - No Details)** when the PAR indicates that "some" physical impairment exists but does not clearly indicate the nature of the impairment.

Enter "98" (Other Physical Impairment) when the PAR indicates a physical impairment that cannot be attributed to one of the other elements above ("01" through "07").

Enter "99" (Unknown If Physically Impaired) when the PAR indicates that the person's physical condition at the time of the accident is unknown.

|          |       |  | P18  |
|----------|-------|--|--|
|          |       | IF   | THEN   |
|          | AP235 | First character of PEDESTRIAN/BIKE ACCIDENT TYPE (A24) equals 1                  | at least one PERSON'S PHYSICAL IMPAIRMENT (P18) should equal 04.         |
|          | PA083 | PERSON'S PHYSICAL<br>IMPAIRMENT (P18) equals 04 and<br>PERSON TYPE (P3) equals 4 | the first character of PEDESTRIAN/BIKE ACCIDENT TYPE (A24) must equal 1. |
|          | AP235 | First character of PEDESTRIAN/BIKE ACCIDENT TYPE (A24) equals 1                  | at least one PERSON'S PHYSICAL IMPAIRMENT (P18) should equal 04.         |
| <b>F</b> | PP085 | PERSON'S PHYSICAL<br>IMPAIRMENT (P18) equals 07                                  | PERSON TYPE (P3) should not equal l.                                     |

# **P19 Non-Motorist Action**

| Element V    | alues   |
|--------------|---|
| Form:        | Non-Motorist  |
| Value        | S   |
| 00           | No Action   |
| Non-Motorist | - Vehicle Operator  |
| 01           | Failing To Have Lights On When Required   |
| 02           | Operating Without Required Equipment  |
| 03           | Improper Or Erratic Lane Changing   |
| 04           | Failure To Keep In Proper Lane Or Running Off Road  |
| 05           | Making Improper Entry To Or Exit From Trafficway  |
| 06           | Operating The Vehicle In Other Erratic, Reckless, Careless Or Negligent Manner                          |
| 07           | Failure To Yield Right Of Way   |
| 08           | Failure To Obey Traffic Signs, Traffic Control Devices Or Traffic Officers, Failure To Obey Safety Zone |
| 09           | Making Other Improper Turn  |
| 10           | Driving On Wrong Side Of Road   |
| Other Non-M  | otorist   |
| 21           | Darting Or Running Into Road  |
| 22           | Improper Crossing Of Roadway Or Intersection (Jaywalking)   |
| 24           | Inattentive (Talking, Eating, Etc.)   |
| 25           | Jogging   |
| 26           | Non-Motorist Pushing A Vehicle  |
| 27           | Walking With Traffic  |
| 28           | Walking Against Traffic   |
| 29           | Playing, Working, Sitting, Lying, Standing, etc. In Roadway   |
| 98           | Other Action  |
| 99           | Unknown Action  |
|              |   |

#### Remarks

This variable attempts to identify circumstances that may have contributed to the cause of the accident. These circumstances ("actions") can appear anywhere on the PAR--in the narrative section, in the violations section, in a column entitled "Contributing Factors" or "Driver Action", etc. Do not consider driver or witness statements unless verified by the investigating police officer.

Enter "00" (No Action) if the PAR does not indicate (either specifically or by implication) that one of the elements listed below applies to this non-motorist. Also, use this code when Person Type (P03) = 3 (Occupant Of A Motor Vehicle Not In-Transport) for this non-motorist or when Person Type = 4 (Occupant of a Non-Motor Vehicle Transport Device) and this non-motorist is not the vehicle operator.

#### Non-Motorist - Vehicle Operator

Elements "01" through "10" and "98" apply to pedalcyclists and operators (as opposed to passengers) of non-motor vehicle transport devices--see P03, Person Type, elements "4" (Occupant Of A Non-motor Vehicle Transport Device) and "6" [Non-Occupant - Cyclist (Pedalcyclist)]. Person Type "4s" who are passengers should be coded "00" (No Action).

If more than one action is indicated for this person, enter the element of lowest numerical value (i.e., "01" takes precedence over "02", etc.).

Enter "01" (Failing To Have Lights On When Required) if the PAR indicates that the pedalcycle or non-motor vehicle transport device was equipped with lights but failed to have them on when required.

Enter "02" (Operating Without Required Equipment) if the PAR indicates that this non-motorist operated the pedalcycle or non-motor vehicle transport device, for example, without installation of the proper light equipment (e.g., headlights, taillights, etc.).

Enter "98" (Other Action) if the PAR indicates that some "other action" (other than one of those listed in elements "01" through "10" above), associated with the operation of the pedalcycle or non-motor vehicle transport device, applies to this person.

Elements "21" through "29" and "98" apply to pedestrians or other non-motorists--see P03, Person Type, "5" (Non-Occupant - Pedestrian), and "8" (Non-Occupant - Other Or Unknown).

The intent of the non-motorist is crucial to the selection of the proper element. Determine the person's intent based upon the evidence available on the PAR.

#### **Other Non-Motorist**

Enter "21" (Darting or Running Into Road) when the person's activity just prior to impact can best be described as a sudden or impulsive dart, run, hurry, etc. movement across (as opposed to along) a road. For example, if a person's activity prior to the accident could best be described as jogging or running [see element "25" (Jogging)], but just prior to the impact the non-motorist darted into the roadway, then enter this value.

Classic examples of this element include (1) children playing who suddenly run into the road to retrieve an object associated with their play (e.g. a ball), and (2) children who dash out from behind a parked car to cross the street.

Enter "22" [Improper Crossing Of Roadway Or Intersection (Jaywalking)] if the person is engaged in crossing a road and was not in the continuation of jogging/running or did not engage in a "sudden or impulsive" dart, run, etc. Generally the crossing will be by walking; however crawling is included.

Enter "24" [Inattentive (Talking, Eating, Etc.)] if a person is standing, sitting, or lying, and perhaps waiting (e.g., chatting), but not a person walking, playing, working, or jogging, and the PAR specifically indicates that the person was inattentive.

Enter "25" (Jogging) if the person was engaged in running, jogging, or moving quickly (hurrying) just prior to collision.

Enter "27" (Walking With Traffic) is used if a person is on or over the road and is moving at a walking pace in the same direction as traffic prior to the collision; however, immediately before the impact, the person may have attempted to jump or run out of the path of the vehicle.

Enter "28" (Walking Against Traffic) is used if a person is on or over the road and is moving at a walking pace in the opposite direction of traffic prior to the collision; however, immediately before the impact, the person may have attempted to jump or run out of the path of the vehicle.

Enter "29" (Playing, Working, Sitting, Lying, Standing, etc. in Roadway) is used if a person is on or over the road and is:

- Playing in the road before the vehicle arrived. The person must not have just run into the roadway after a ball, for example. Playing in the road includes ball games, fighting, grabbing hold of cars, or playing "chicken" with vehicles;
- Present in the road because of the requirement of his/her job. This includes police, emergency
  personnel, flagmen, traffic guards, roadway construction, or maintenance crew, garbage men,
  etc., but not people who are in the street voluntarily, such as a civilian directing traffic at the
  scene of an accident; or
- Standing, sitting, lying, etc. (but not moving) and the action does not fit in element "24" [Inattentive (Talking, Eating, etc.)]

Joggers/runners can walk for a brief spell; walkers can run for short distances. When distinguishing joggers/runners (element "25") from walkers (elements "27" and "28") focus on the intent of the person's activity prior to their involvement in the accident.

Enter "98" (Other Action) if the PAR indicates that an "action"--other than one which would "best fit" in the elements specifically described above, applies to this person. For example, use this element if a person is waiting to cross a road, loitering, or waiting for a bus. The person can be anywhere off a road (e.g., sidewalk, median, traffic island, roadside, etc.).

Enter "99" (Unknown Action) if the PAR indicates that some "action" is noted for this non-motorist, but the information on the PAR is insufficient or unclear to determine what action (element) to code.

|       |   | P19   |
|-------|---|---|
| AP061 | PEDESTRIAN/BIKE ACCIDENT<br>TYPE (A24) equals 0520 and<br>PERSON TYPE (P3) equals 5 | THEN NON-MOTORIST'S ACTION (P19) must equal 21 or 22.   |
| AP062 | PEDESTRIAN/BIKE ACCIDENT<br>TYPE (A24) equals 0001, 0002,<br>0004, 0005, or 0049    | NON-MOTORIST'S ACTION (P19) must equal 01-07.   |
| AP063 | PEDESTRIAN/BIKE ACCIDENT<br>TYPE (A24) equals 0830                                  | NON-MOTORIST'S ACTION (P19) should equal 21.  |
| AP129 | PEDESTRIAN/BIKE ACCIDENT<br>TYPE (A24) equals 0750 or 0840                          | NON-MOTORIST'S ACTION (P19) must not equal 21.  |
| AP156 | PEDESTRIAN/BIKE ACCIDENT<br>TYPE (A24) equals 0410 or 0430                          | at least one NON-MOTORIST'S ACTION (P19) must equal 29.   |
| AP157 | PEDESTRIAN/BIKE ACCIDENT<br>TYPE (A24) equals 0531                                  | at least one NON-MOTORIST'S ACTION (P19) must equal 25 or 27.   |
| AP158 | PEDESTRIAN/BIKE ACCIDENT<br>TYPE (A24) equals 0532                                  | at least one NON-MOTORIST'S ACTION (P19) must equal 25 or 28.   |
| PA064 | NON-MOTORIST'S ACTION (P19) equals 29   | PEDESTRIAN/BIKE ACCIDENT TYPE (A24) must not equal 0610 or 0620.  |
| PA065 | NON-MOTORIST'S ACTION (P19) equals 07   | PEDESTRIAN/BIKE ACCIDENT<br>TYPE (A24) must equal 0001, 0002,<br>0003, 0004, 0005, 0018, 0019, 0021,<br>0026, 0040, 0049, 0097, 0098, or<br>0099. |
| PA168 | NON-MOTORIST'S ACTION (P19) equals 27   | PEDESTRIAN/BIKE ACCIDENT TYPE (A24) should equal 0531.  |
| PA169 | NON-MOTORIST'S ACTION (P19) equals 28   | PEDESTRIAN/BIKE ACCIDENT TYPE (A24) should equal 0532.  |
| PA170 | NON-MOTORIST'S ACTION (P19) equals 25   | PEDESTRIAN/BIKE ACCIDENT<br>TYPE (A24) should equal 0531,<br>0532, or 0539.   |

| • | • | 4 | • |
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|   |   |   |   |

|       | IF                             | THEN  |
|-------|--------------------------------|---|
| PP040 | PERSON TYPE (P3) equals 4 or 6 | NON-MOTORIST'S ACTION (P19) must not equal 21-29. |
| PP041 | PERSON TYPE (P3) equals 5 or 8 | NON-MOTORIST'S ACTION (P19) must not equal 01-10. |
| PP068 | PERSON TYPE (P3) equals 3      | NON-MOTORIST'S ACTION (P19) must equal 00.        |

# P20 Non-Motorist Safety Equipment Use

### **Element Values**

Form: Non-Motorist

#### **Values**

- 0 None Used Or N/A
- 1 Bicycle Helmet
- 2 Reflective Equipment
- 3 Bicycle Helmet And Reflective Equipment
- 8 Other Safety Equipment
- 9 Unknown If Used

#### Remarks

This variable attempts to identify safety equipment worn or carried by the non-motorist [Person Type (P03) = "4" (Occupant Of A Non-Motor Vehicle Transport Device), "5" (Pedestrian), "6" (Cyclist) or "8" (Other or Unknown)].

Enter "0" (None Used or N/A) when the PAR specifically states that the non-motorist was not wearing or carrying any type of safety equipment. Also, use this code when the non-motorist is not one of the above Person Types (4, 5, 6 or 8).

Enter "1" (Bicycle Helmet) when the PAR indicates that the non-motorist was wearing a bicycle safety helmet. The non-motorist does not have to be riding a bicycle at the time of the accident to use this code.

Enter "2" (Reflective Equipment) when the PAR indicates that the non-motorist was wearing or carrying some type of reflective equipment. The emphasis is on the reflective property of the equipment and does not include devices which give off light under their own power (e.g. flashlights). The equipment can be reflective tape affixed to regular clothing, special reflective clothing, a reflective device which is worn or a reflective device which is carried. It can be made by the non-motorist and does not have to be specially designed as a safety device.

Enter "3" (Bicycle Helmet and Reflective Equipment) when the PAR indicates that both codes "1" and "2" would apply for this non-motorist (i.e. the non-motorist was both wearing a bicycle helmet and using reflective equipment).

Enter "8" (Other Safety Equipment) when the PAR indicates that the non-motorist was using safety equipment and it does not fit into elements "1", "2", or "3". Any device that produces a visual signal but is not reflective (e.g. flashlight) or any clothing that is non-reflective but considered to be safety equipment (hi-glo orange clothing) should be coded using this element.

Enter "9" (Unknown If Used) if specifically stated on the PAR or there is no information on the PAR that the non-motorist was using safety equipment or clothing.

|       |  | P20   |
|-------|--|---|
| PP061 | IF NON-MOTORIST SAFETY EQUIPMENT USE (P20) equals 1 or 3 | THEN PERSON TYPE (P3) should equal 6.                 |
| PP072 | PERSON TYPE (P3) equals 1, 2, or 9                       | NON-MOTORIST SAFETY EQUIPMENT USE (P20) must equal 0. |
| PP073 | PERSON TYPE (P3) equals 3                                | NON-MOTORIST SAFETY EQUIPMENT USE (P20) must equal 0. |

# P21 Air Bag Availability/Function

## **Element Values**

| Form:  | Occupant                         |
|--------|----------------------------------|
| Values |                                  |
| 0      | No Air Bag Available             |
| 1      | Deployed                         |
| 2      | Non-Deployed                     |
| 9      | Unknown If Available Or Deployed |
|        |                                  |

## Remarks

This variable seeks to capture whether the vehicle was equipped with an air bag (in the seat position of this occupant) and, if so; did it deploy.

**Enter "1" (Deployed)** when the PAR indicates that an air bag deployed for the seat position occupied by this person.

Enter "2" (Non-Deployed) when the PAR indicates that an air bag existed at this occupants seat position but it did not deploy.

Enter "9" (Unknown If Available Or Deployed) when it is not known whether an air bag is available in the seat position of this occupant or an air bag was available but it is not known whether it deployed.

|       |   | P21   |
|-------|---|---|
|       | IF  | THEN  |
| PP074 | SEATING POSITION (P4) equals 12, 21-53  | AIR BAG AVAILABILITY/<br>FUNCTION (P21) must equal 0.                         |
| PP076 | SEATING POSITION (P4) does not equal 11 or 13   | AIR BAG<br>AVAILABILITY/FUNCTION (P21)<br>must not equal 1 or 2.              |
| PP080 | AIR BAG<br>AVAILABILITY/FUNCTION (P21)<br>equals 1 or 2   | SEATING POSITION (P4) must not equal 12, 21-99.                               |
| PV171 | AIR BAG<br>AVAILABILITY/FUNCTION (P21)<br>equals 1 or 2 and BODY TYPE (V5)<br>equals 20                       | VEHICLE MAKE (V3) should equal 06, 07, 09, 12, 14, 20, 21, 22, 35, 41, or 49. |
| PV172 | AIR BAG<br>AVAILABILITY/FUNCTION (P21)<br>equals 1 or 2   | BODY TYPE (V5) must equal 01-39, 48, or 49.                                   |
| PV194 | AIR BAG AVAILABILITY/<br>FUNCTION (P21) equals 1 or 2 and<br>BODY TYPE (V5) equals 14-19                      | VEHICLE MAKE (V3) should equal 02 or 12.                                      |
| PV195 | AIR BAG AVAILABILITY/<br>FUNCTION (P21) equals 1 or 2 and<br>BODY TYPE (V5) equals 21                         | VEHICLE MAKE (V3) should equal 09, 12, or 20.                                 |
| PV196 | AIR BAG AVAILABILITY/<br>FUNCTION (P21) equals 1 or 2 and<br>BODY TYPE (V5) equals 14-19,<br>21-29, 48, or 49 | MODEL YEAR (V6) must be greater than 91.                                      |
| PV202 | AIR BAG AVAILABILITY (P21) equals 1 or 2 and BODY TYPE (V5) equals 31   | MAKE (V3) should equal 07, 12, 20, or 49.                                     |
| VP173 | BODY TYPE (V5) equals 40-45, 50-97  | AIR BAG<br>AVAILABILITY/FUNCTION (P21)<br>should equal 0.                     |
| VP174 | UNLIKELY: AIR BAG AVAILABILITY/F<br>when MODEL YEAR (V6) is less then 70                                      |   |

# P22 Non-Motorist Striking Vehicle Number

## **Element Values**

Form:

Non-Motorist

**Values** 

00

Not Applicable - Vehicle Occupant

01-30

Assigned Vehicle Number

99

Unknown

## Remarks

This variable captures the vehicle which made contact with the nonmotorist being coded.

The value entered must match the vehicle number of the striking vehicle.

If the nonmotorist made contact with more than one vehicle, code the number of the vehicle that caused the most significant injury. If it is not possible to determine which vehicle caused the most significant injury, code the number of the vehicle which made contact first.

Code "99" (Unknown) is used when it cannot be determined which vehicle made contact.

|       |  | P22   |
|-------|--|---|
|       | IF   | THEN  |
| PA200 | NON-MOTORIST STRIKING VEHICL the NUMBER OF MOTOR VEHICLES                |   |
| PA201 | PERSON TYPE (P3) equals 3-8 and NUMBER OF MOTOR VEHICLES (A3) equals 01  | NON-MOTORIST STRIKING<br>VEHICLE NUMBER (P22) must<br>equal 01. |
| PP082 | NON-MOTORIST STRIKING<br>VEHICLE NUMBER (P22) equals 00                  | PERSON TYPE (P3) must not equal 3-8.                            |
| PP083 | NON-MOTORIST STRIKING<br>VEHICLE NUMBER (P22) is equal<br>to 01-30 or 99 | PERSON TYPE (P3) must not equal 1, 2, or 9.                     |



VA218

MOVEMENT PRIOR TO CRITICAL EVENT (V21) equals 00 and at least one PERSON TYPE (P3) equals 5, and, for this person, NONMOTORIST STRIKING VEHICLE # (P22) equals the vehicle # for which V21 equals 00

## **THEN**

PEDESTRIAN/BIKE ACCIDENT TYPE (A24) must equal 0210.

# Appendix

## **NASS Accident**

A NASS Accident is an event on a police accident report;

- the event is reported to the State;
- the event must report a harmful event (property damage or personal injury);
- this harmful event must have occurred as the result of a motor vehicle accident;
- at least one involved motor vehicle is in-transport (in motion or on the roadway); and
- the accident occurred on the trafficway. (area within the right of way)

## **Coding Assumptions**

While coding, certain variables are coded based on the presence or lack of information on the PAR.

## Not Injured

If the person is on the scene at the time of the report and no mention of injury is made, the assumption is that there is no injury (Injury Severity, P9, equals "0"). If, however, the involved person has left the scene when the report is made, injury for that person will be coded unknown.

## **Not Transported**

If there is no injury and no mention of whether the person is transported, then that the person is not transported (Taken to Hospital Or Treatment Facility, P10, equals "0").

#### **Not Ejected**

If there is no injury and no mention of ejection, that person is not ejected (Ejection, P6, equals "0"). If the person is injured, and there is no mention of ejection, code unknown.

#### No Jackknife

Only a truck-tractor combination can have a jackknife. If there is no information concerning jackknife, there is no jackknife (Jackknife, V14, equals "0"). (There is no "unknown" value.)

#### No Rollover

If there is no information to indicate that a vehicle rolled over, then no rollover occurred. If there is an indication on a diagram that a vehicle rolled over (for example, there is an "X" across the vehicle in the diagram, and/or top damage is noted), code at least that the rollover occurred (Rollover Type, V30, equals "99"). NOTE: motored cycles do not roll over.

## **Non-NASS Accident**

Occasionally, a PSU will sample and send a PAR to the coding contractor which does not meet the requirements for a NASS accident. When this occurs, the coder will remove the PAR from the file and have the case deleted from the system. This is done only after approval from the data coding Supervisor. The following are some common circumstances under which a PAR may be removed:

## **Private Property**

Land that is other than a trafficway. Examples of private property non-nass crashes include: a car in a parking lot strikes a parked vehicle in the same lot (no traffic control device), a vehicle turns into a driveway, remains in control, goes to the end of the driveway and strikes a carport; or any time the total accident sequence occurs outside a trafficway (in a gas station lot, etc.).

## No In-transport vehicle involved

A crash occurs which involves no motor vehicle in transport. For example, a car is parked, not in-transport, when the driver opens the door. The door is struck by a bicyclist who is riding the bicycle along the shoulder or edge of the roadway.

#### **Deliberate Intent**

The cause of an event which occurs when a person acts deliberately to cause the event or deliberately refrains from prudent acts which would prevent occurrence of the event. For example, self-inflicted injury or suicide would be considered deliberate intent. Also, after an argument, one person who hit the other involved party intentionally (and the police note that on the PAR) would be considered deliberate.

## **Environmental Variables**

The environmental variables in the GES include: A8, Interstate Highway, A26, NHS Roadway Type, A11, Trafficway Flow, A12, Number of Travel Lanes, A13, Roadway Alignment, A14, Roadway Profile, A16, Traffic Control Device, and A18, Speed Limit.

When the First Harmful Event occurs in an intersection, the coder must decide which roadway to use for coding these variables. To assist in that decision, the following information will be used to determine which roadway to use.

First, use *roadway surface* type to select the roadway. If one roadway is paved and the other roadway is not, use the one which is paved.

If the surface type is the same on both roadways, or if the surface type is unknown, use the number of travel lanes. Count the *number of travel lanes* (on the diagram or in a match up block). If one roadway has more travel lanes, use that roadway.

If the number of travel lanes is the same or is unknown, then use the vehicle which most contributed to the cause of the accident.

## **Using the Vehicle Identification Number**

For light trucks made by Ford and GM (GMC, Chevrolet) after 1980, there is information available in the VIN to determine whether the truck is light or not. This rule is most useful on a PAR that provides a VIN and which identifies a vehicle only as a "Ford truck", or a "Chevrolet truck" or a "GMC truck".

For Chevrolet/GMC, model year 81-present, if the truck has a 1, 2, or 3 as the sixth character from the left, the vehicle is not a medium heavy truck.

For Ford, model year 81-present, if the truck has a 1, 2, 3, or 4 as the sixth character from the left, the vehicle is not a medium/heavy truck.

Saturn

## **Light Vehicle Manufacturers**

The following manufacturers make only light vehicles (automobiles, vans, light trucks, motorcycles). There are NO medium/heavy trucks (no V5=60-78) in these makes:

Acura Lexus Lincoln Alfa Romeo Lotus American Motors Aston Martin Mazda Audi Mercury Austin/Austin Merkur MG Healy Oldsmobile Bentley

Beintey

Buick

Peugeot

Buick

Plymouth

Cadillac

Chrysler

Eagle

Renault

Ferrari

Rolls Royce

Honda

Saab

ImperialSterlingInfinitiSubaruJaguarSuzukiJeepToyotaKiaTriumphLamborghiniVolkswagenLanciaYugo

Land Rover

Hyundai

## **Medium/Heavy Manufacturers**

Diamond Reo/Reo

The following is a list of truck Makes (V3) which can never be light trucks, and must always be coded as medium/heavy trucks (Body Type, V5, equal to 60-78). If the vehicle is described as a "truck" and is one of these Makes, then it should be coded using codes from the medium/heavy truck category. Any Make on this list must not be coded "79" for Body Type (V5).

Autocar Mack Magirus Auto-Union-DKW Marmon Brockway Mercedes-Benz

Navistar Divco Fiat Oshkosh Peterbilt Freightliner / White Scania (Saab) **FWD** 

International Harvester / Navistar-1980 on Volvo

Ward/La France (fire truck only) IVECO / Magirus

Western Star Kenworth White La France (fire truck only)

## **Bus Manufacturers**

The following can only be a bus, Make "98", with a Body Type of bus (V5 equal to 50-59): Neoplan.

## **Heavy Truck Terms and Abbreviations**

the Autocar Tractor A-Car

tractor being driven without a trailer attached **Bobtail** 

the trailer being pulled by a tractor Box or Semi

Bulldog a Mack Tractor drivers compartment Cab

tractor with the cab placed directly over the engine Cabover tractor with the engine placed in front of the cab Conventional Cab an International Harvester truck or tractor Cornbinder

unit sometimes referred to as a haybinder "Haybinder"

DR/Diamond/REO Diamond REO Tractor

a diesel powered truck or tractor **Diesel Rig** a trailer with an enclosed body Dry Van a dump truck or dump body **Dumper** 

a flat bed trailer Float

a tractor operating on gasoline Gas Burner

KW/"Kay Wobbley" Kenworth Tractor

a Tractor that operates on liquefied petroleum fuel L.P. Rig

Mack tractor with a special transmission Maxidine

a truck mounted cement mixer Mixer

a Peterbilt Tractor Pete a refrigerated trailer Reefer

a trailer having rear wheels only; the front end being supported by the tractor Semi

**Single Screw** 

a tractor with a single driven axle

Six by Six

a tractor having six wheels driving or a three axle rig (6X6); i.e. a tandem rear

end with front axle drive.

Sleeper Cab

a tractor with a sleeping compartment across the back of the cab

**Tractor** 

the power unit designed to pull the trailer as opposed to a truck which normally

has an extended frame upon which is placed a body of some type

**Truck** 

a unit capable of carrying cargo by itself having a carrying surface on which to

load the cargo

Twin Screw

a double rear axle drive unit, tandem or "bogie"

West Coast Rig

a special light weight truck or tractor usually constructed of aluminum

# **Glossary of Terms**

#### Accident

Any incident involving property damage or bodily injury between any of the following: pedestrians, non-motorists, cyclists, and motor vehicles.

#### **Alley Access**

At grade intersection an unnamed roadway providing access, in general, to the rear of houses or buildings, some of which may be further served by a driveway access.

#### At-grade Intersection

An intersection where all roadways cross or join at the same level.

#### **Automobile**

A motor vehicle other than a motorcycle consisting primarily of a transport device designed for carrying ten or fewer persons.

#### **Bicyclist**

Only those pedalcyclists who were either a driver or passenger on a bicycle. This includes those bicyclists who hold onto a motor vehicle in motion.

#### Case

One PAR after it has been coded and entered into the General Estimates System.

#### Channel

Any traffic lane that is directed into a path different than the through lanes by a traffic island. An island is defined as a raised or painted paved surface. The channel begins and ends at the entenstion of the island's lateral boundaries unless the channel is preceded or followed by an area of mergence or divergence.

#### **Channel Island**

The defined area between traffic lanes for control and guidance of vehicle movement. Islands may be provided for separation and special control of turning movements. Islands can separate opposing traffic or traffic in the same direction. An island may be designated by paint, curbs or pavement edge and can be paved or have a low growing plant cover.

#### Coding

Reading a PAR, determining the correct matchups for each variable, and entering that data into the data entry system.

#### Crossover

A designated opening within a median used primarily for "U turns". To be considered a crossover, the nearest lateral boundary line of the crossover must be greater than 10 meters from the nearest lateral boundary line of any roadway (highway, street, ramp, driveway, or alley) which intersects with either side of the roadways which the median divides.

#### Crosswalk

1) That part of a roadway at an intersection included within the connections of the lateral lines of the sidewalks on opposite sides of the roadway measured from the curbs or 2) any portion of a roadway at an intersection or elsewhere distinctly indicated for pedestrian corssing by lines or other markings on the surface of the roadway.

#### Culvert

A man-made structure that allows passage over a drainage area and that is part of the structure which is intended to channel flow through the structure and maintain the stability/integrity of the road bed.

#### **Cyclist**

The rider of a bicycle or adult tricycle.

#### **Damage**

Harm to property that reduces the monetary value of that property.

#### Ditch

A man-made structure for drainage purposes. A ditch ends where a culvert begins and resumes on the opposite side of the culvert.

#### **Driveway Access**

A roadway providing access to property adjacent to a trafficway.

#### **Entrance Ramp**

An Entrance or Exit Ramp is a transition roadway: (1) which connects two roadways; (2) is used for entering or exiting through traffic lanes; and (3) begins and ends at a gore or curb return. A ramp can connect two roadways which cross (either at grade or with a grade separation) or two which do not cross (e.g., frontage roads). A ramp can form an intersection with a roadway as well as diverge from or merge into one. A ramp can form a channelized intersection. A ramp can also split into two ramps.

#### **Exit Ramp**

An Entrance or Exit Ramp is a transition roadway: (1) which connects two roadways; (2) is used for entering or exiting through traffic lanes; and (3) begins and ends at a gore or curb return. A ramp can connect two roadways which cross (either at grade or with a grade separation) or two which do not cross (e.g., frontage roads). A ramp can form an intersection with a roadway as well as diverge from or merge into one. A ramp can form a channelized intersection. A ramp can also split into two ramps.

#### First Harmful Event

The "first" property damage or injury producing event that can be determined to have happened in the accident.

#### **Fixed Linkage**

A linkage which has the property of keeping the towed unit separated from the power unit by a distance which is essentially constant. Included within this definition are cradle linkages where the towed unit has two or more wheels off the ground.

#### Gore

An area of land where two roadways diverge or converge. The area is bound on two sides by the edges of the roadways, which join at the point of divergence or convergence. The direction of traffic must be the same on both of these roadways. The area includes shoulders or marked pavement, if any, between the roadways. Inclusions are: areas at rest area entry or exit ramps, areas at truck weigh station entry or exit ramps, areas where two main roadways diverge or converge, areas where a ramp and another roadway, or two ramps, diverge or converge, and areas where a frontage road and another roadway, or two frontage roads, diverge or converge. Normally one of the roadways will be a ramp.

#### **Grade Separation**

A crossing at different levels of two trafficways, or a trafficway and a railway.

#### **Harmful Event**

An occurrence of injury or damage.

#### In-transport Motor Vehicle

In order for a vehicle to be considered in-transport, the motor vehicle must be either (1) on the roadway or (2) in motion on the trafficway. This includes driverless vehicles.

#### Injury

Bodily harm to a person.

#### Interchange Area

An interchange area is the area around a grade separation which involves at least two trafficways. Included within its boundaries are: (1) all ramps which connect the roadways and (2) each roadway entering or leaving the interchange to a point 30 meters beyond the gore or curb return at the outermost ramp connection for the roadway. One may find included within an interchange area intersections, driveway accesses, and, of course, roadway sections which are non junctions.

#### Intersection

A type of junction which: (1) contains a crossing or connection of two or more roadways not classified as a driveway access or alley access, and (2) is embraced within the prolongation of the lateral curb lines or, if none, the lateral boundary lines of the roadways. Where the distance along a roadway between two areas meeting these criteria is less than 10 meters, the two areas and the roadway connecting them are considered to be parts of a single intersection.

#### Intersection Related

Intersection Related means that the first harmful event (A6, First Harmful Event): (1) occurs on an approach to or exit from an intersection, and (2) results from an activity, behavior, or control related to the movement of traffic units through the intersection.

#### Jackknife

A noncollision accident in which the harmful event results from unintended contact between any two units of a truck/tractor combination.

#### Junction

The area formed by the connection of two roadways. It includes: (1) all at grade intersections, (2) connections between a driveway access or alley access and a roadway which is not a driveway access or an alley access, (3) connections between two alley accesses or driveway accesses, or (4) a connection between a driveway access and an alley access.

#### **Motor Vehicle**

Any motorized (mechanically or electrically powered) road vehicle not operated on rails.

#### Motorcycle

A motor vehicle having a seat or saddle for the use of its operator and designed to travel on not more than three wheels in contact with the ground.

#### **Non-Collision Injury**

When a person falls from or is injured inside the vehicle. This includes persons jumping or stepping from moving vehicles, persons falling from pickup beds, and persons colliding with the interior of a vehicle during a sudden stop.

#### Non-motorist

Any person who is a pedestrian, a cyclist, an occupant of a vehicle not in transport, a person on a nonmotorist conveyance, etc.

#### **Non-NASS**

Any accident that does not meet the criteria for a NASS accident [i.e., that does not occur on a trafficway (or where there was no loss of control on the trafficway), does not involve a harmful event, or does not in any other way follow the definition of a NASS accident]. These PARs are excluded from the sample and no data is collected from them.

#### Noncollision

Any road vehicle accident other than a collision accident. Inclusions: overturning accident; jackknife accident; fire statring in a road vehicle in transport; fall or jump from a road vehicle in transport; occupant hit by an object in, or thrown against some part of a road vehicle in transport; object falling from, or in, a road vehicle in transport; object falling on a road vehicle in transport; and others.

#### **Nonfixed Linkage**

A linkage (such as a rope or a chain) which requires the towed unit to be manually controlled. If the linkage between the units is nonfixed, each vehicle is considered to be in transport, and only the vehicle(s) involved in the accident sequence can be counted. If no information is available regarding type of linkage, assume fixed linkage.

#### **Nonmotorist Conveyance**

Any human powered device by which a nonmotorist may move, or by which a pedestrian or nonmotorist may move another nonmotorist, other than by pedaling. A nonmotorist conveyance includes the following: baby carriage, coaster wagon, ice skates, roller skates, push cart, scooter, skate board, skis, sled, wheel chair, rickshaw, etc. This includes those persons in a nonmotorist conveyance who hold onto a motor vehicle in motion. Excluded are pedalcyclists.

#### **Occupant**

Any person who is part of a motor vehicle in transport. A person sitting in a motor vehicle in transport, whether in a designated seat or not, is considered to be an occupant. Also, a person riding in the open bed of a pickup or in a trailing unit attached to a motor vehicle in transport is considered an occupant. A person sitting in a motor vehicle not in transport is considered a non motorist.

#### Other cyclist

All other pedalcyclists such as persons on tricycles or unicycles. This includes those pedalcyclists who hold onto a motor vehicle in motion

#### Other Non-Collision

When a vehicle sets an object in motion that strikes or is struck by a vehicle before the object stabilizes. Examples include dislodged cargo, spewed gravel, etc. It may be used in other situations as well.

#### Other nonmotorist

Any other person not included under the above definitions of a pedestrian, bicyclist, other cyclist, or occupant of a motor vehicle not in transport. Persons riding on an animal or in an animal powered conveyance are one example. Any person outside a trafficway or outside a sidewalk or path contiguous with a trafficway is another

#### Overtaking

When both operators are on parallel paths, heading in the same direction, the vehicle that approaches from behind and is going faster than the vehicle in front is the overtaking vehicle.

#### **PAR**

. A Police Accident Report.

#### **Pedalcyclist**

A nonmotorist who is a driver or passenger on a bicycle, tricycle, or unicycle. This includes a cyclist who holds onto a motor vehicle in motion.

#### **Pedestrian**

Any person who is on a trafficway or on a sidewalk or path contiguous with a trafficway, and who is not in or on a nonmotorist conveyance. This includes persons who are in contact with the ground, roadway, etc., but who are holding onto a vehicle.

#### **Phantom Vehicle**

A vehicle alleged by the driver to have been involved in the accident but which the reporting officer cannot substantiate.

#### **PSU**

Primary Sampling Unit. There are 60 research locations in the NASS, with teams of one to four persons at each PSU. Each PSU team is comprised of a team leader and a research assistant and one or two researchers, or one (GES) data collector.

#### Road

The part of a trafficway that includes both the roadway and any shoulder alongside the roadway.

#### Roadway

That part of the trafficway specifically designed for vehicle travel, also called the travel lanes (includes through lanes, thrn lanes, and parking lanes, but does not include shoulders). A vehicle parked on a road of reduced width because of conditions such as snow accumulation is considered in transport if any part of the vehicle is on the roadway.

#### Rollover/Overturn

When a motor vehicle rotates (rollover), at least, one quarter turn in any nonhorizontal direction.

#### **Shoulder**

That part of a trafficway contiguous with the roadway for emergency use, for accommodation of stopped road vehicles, and for lateral support of the roadway structure.

#### **Thrown Or Falling Object**

When any object (1) is thrown (intentionally or unintentionally) and impacts an in transport vehicle, or (2) falls onto, into, or in the path of an in transport motor vehicle.

#### **Traffic Circle**

A specialized form of at grade intersection. It is one through which traffic passes by entering and leaving a one way roadway connecting all intersection approach legs and running continuously around a central island. Rotary intersections are commonly called traffic circles, but proper design can result in central islands of various rounded shapes.

#### **Traffic Units**

Any road vehicle or pedestrian involved or not involved in the accident.

#### **Trafficway**

That portion of land bounded on each side by rights of way between which run roadways, shoulders, sidewalks and roadside areas. The harmful event or loss of control that led to the accident must have occurred within the boundaries of a trafficway.

#### Value

The data element entered into the data entry system. Each variable has a range of values that are acceptable for that variable.

#### **Variable**

An item of information that is captured by the data entry system.

#### **Vehicle**

A motor vehicle, that which is powered on wheels, with an engine.